

A
T R E A T I S E
ON THE
G O U T.

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J. Trumbull's.

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T R E A T I S E

O N T H E

G O U T:



From the FRENCH of

M. CHARLES LOUIS LIGER, M.D.

Professor of Physic in the University of PARIS.

Est quoddam prodire tenus, si non datur ultra. HOR.



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J. C. Sumner.

1842

P R E F A C E

BY THE

E D I T O R.

IN this Treatise M. LIGER undertakes to discover the real cause, and to distinguish the true character of the Gout; he also proposes such means, as undoubtedly appear to him effectual, as well for the prevention as the cure of this distemper, which has hitherto been deemed a reproach to physical knowledge. That our Author has assiduously studied, and been earnestly attached to, his subject, is manifest from the numerous authors both antient and modern that he has

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quoted. Nevertheless he does not seem a slave to authority; his remarks upon, and objections to, the opinions of those writers, who have previously traversed the same path of medicine, appear generally pertinent, and judicious.

The faculty of physick at *Paris* have distinguished both our Author's *Theory* and *Practice* with very particular and very high marks of approbation: how far they may be judged entitled to an equal degree of esteem *here*, is now submitted to the candour of the *English* reader. Many of his sentiments will, most probably, be thought singular if not new; and tho' M. LIGER professes to write principally for the service of his own country, yet it may reasonably be presumed, that his doctrines and precepts will not be of less utility

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utility in *Great Britain*, where there are perhaps as many, if not more, victims to this excruciating distemper than in any other part of the world.

This was the immediate motive for bestowing an *English* dress on this work; and more especially when, upon perusal of the original, it was found, that some of M. LIGER's observations were corroborated by writers of eminence on the art of healing in our own country: Particularly our Author's remark of the greater prevalence of the Gout in those provinces where cyder and beer is most plentiful, and chiefly used for common drink, is amply confirmed by the truly learned and ingenious Dr. HUXHAM. *

* In Opusculo de Morbo colico Damnoniensi, adjunct. Observat. de Aere, &c. p. 14.

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It is acknowledged that considerable liberties have been taken with the original, especially in paring away some exuberancies: the medical reader may perhaps be inclined to think that this freedom might have been more liberally exercised without any prejudice to the Author, and with more reputation to the Editor. But it should be remembered that the instructions herein contained, seem evidently intended as well for the information of the patient, as the direction of the physician.—M. LIGER himself, conscious of the disagreeableness of frequent repetitions, thus apologizes for them:—that having a multitude of old and obstinate prejudices to combat, it was necessary always to keep the principles of his system in view.

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T R E A T I S E
O N T H E
G O U T.

I N T R O D U C T I O N.

THE gout is a disorder common to all civilized nations, but more common in cities than in country-places. It is generally supposed to proceed from voluptuousness, whence it is rarely found to affect rustics, and is still more rarely to be met with among savages.

The Greeks and Latins have distinguished three species of the gout: the *Podagra*, the *Chiragra*, and the *Sciatica*, denomina-

B

tions

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tions taken from the respective seats of the several articulations particularly affected.

The gout is more frequent in Spring and Autumn, than in Winter or Summer. It is commonly defined a disease of the articulations occasioned by a vitiation of the *Synovia*, whence pains and tumours arise on the *membranes* that envelop the affected articulations ; for the bones and cartilages themselves are insensible.

It is generally agreed that there is somewhat extraordinary in the causes of this malady, but they are far from being yet precisely determined. There have been perhaps as many different opinions, as there have been Authors who have treated on the subject.

Nevertheless, it might be of singular service to physic to examine carefully and report an analysis of each writer's sentiments, to the end that every one might have

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have an opportunity of considering every opinion; but, exclusive of the time necessary for the completion of such an undertaking, both the author and the reader would soon be tired of so tedious and uninteresting a detail: for there are a great number of writers who have distinguished themselves from others only by *minutiæ*, or who have taken what was, at most, only some determining causes of the *fits* of the gout, for the causes of the gout itself.

In order to save the reader so disagreeable a task, all the different opinions are here arranged in separate classes; the particular system of each, is carefully examined, and their respective faults are separately distinguished.

This appeared to me a proper introduction to my undertaking, in order to shew the necessity there was to attempt an ex-

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planation of the true cause of the gout, which hitherto has not been known, and which also, possibly, may be the reason that this distemper is looked upon as incurable ; for it must be difficult to treat a distemper of which the primary cause is unknown.

The system here proposed is founded on observation only ; and it was a long and close attention to the various phænomena attending the gout, that led me to conclude the real cause to be very different from what has hitherto been imagined.

The plan of this performance, is as follows: the work is divided into three parts ; the first contains the principal systems relating to the cause of the gout, as they are found in original authors ; for most commentators, translators, and epitomisers, of whom there are at present more than a few, have generally corrupted the text, and disfigured the thoughts of the Authors that they have con-

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consulted. The imperfect satisfaction received from those opinions led me to trace the origin of this distemper from another source.

This appears in the second part, which begins with a history of the progress of the gout; a malady that for centuries past seems to have been improving its tortures. This history not only throws some light upon the nature of this disease; but it also evinces the necessity of a further enquiry into the cause of the gout, which is attempted to be explained in as precise and as clear a manner, as a work of this size would admit; as well with regard to those countries where it may be said to be endemial, as to those in which it may with equal propriety be termed epidemical. But exclusive of the original cause of the gout, there are many determining causes of the several fits, which are here endeavoured to be elucidated so far as is necessary for

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the information or direction of the real Physician.

In the third part, the distemper is regularly treated: The symptoms, the diagnostics, and prognostics, under different circumstances, are severally considered; and a method of cure is proposed as well for particular fits, as for the distemper in general, whether regular or irregular.

PART

P A R T I.

C H A P. I.

*The Opinions of HIPPOCRATES and the
ANCIENTS.*

OF all the distempers, that affect the articulations of the human body, none is more frequent than that commonly called the gout. Tho' it was not very frequent in the time of Hippocrates, he speaks of it as of a distemper that had been long known.

Among the works of all the ancient physicians, those attributed to Hippocrates are the earliest that have been transmitted to us; wherefore, to proceed with consistence, it will be proper to begin with his sentiments of this distemper. I even hope, that my translating here all he has said of the gout will not be taken amiss, as what

observes, tho' very short, has been made use of as a basis and direction to all who have treated of it since his time.

He expresses himself in the following manner. A person under the fit of the gout, feels in the articulations, a painful sensation, as of fire. This distemper is sometimes acute, and causes pains more or less sensible, sometimes in one articulation, and sometimes in another. Refrigerating topics should be applied to the part affected; the stomach and intestines must be cleared by purgatives and diuretics; but these remedies must be only taken in infusion; and, lastly, to observe what remedies have been most successful, in order to the further prosecution of them. The cause of this distemper is the mixture of the bile and phlegm, which, after being put in motion, subside on these articulations. This is an acute distemper, but of small continuance, not dangerous, and to which youth is more subject than age.

He

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He afterwards enters on the method of treating the several kinds of gout, and begins with a description of the *Podagra*, or that which seizes the feet. Of all the pains, says he, which are felt in these different articulations, none are more violent than those, to which the articulations of the feet are subject. They are of a very long continuance, and not discussed without great difficulty. The cause of them is a corrupted bile and phlegm, lodged in the veins. This distemper is lasting and severe, tho' not mortal, by reason of the number of parts affected by it, as the veins, nerves, or bones. He seems to admit of the same cure for this kind, for he only says, that if the seat of the distemper be in the fingers or toes, the part affected must be cauterized with flax, a little above the articulation.

The second kind he mentions is the pain in the hips, generally known under the name of *Sciatica*. It seizes the articulation

tion of the *femur* and the cavity of the *os ischium*, and all the circumjacent parts. In the last stage of this distemper, the pain extends itself through all parts of the leg. The pain, says Hippocrates, is to be abated by warm baths, fomentations, and relaxing the belly; and in its decline purgatives are to be used, after which the patient should drink asses milk. The cause of the *Sciatica* is a corrupted bile and phlegm deposited in the veins; but this corruption has been occasioned by a former sickness, or the whole blood has been spoiled and vitiated by this bile and phlegm. When the obstinacy of the pain will not yield to the above remedies, the part affected must be cauterized.

It is easily perceived that the bile and phlegm, put into motion in the veins, and sometimes corrupted, by settling on the joints, are the only causes to which Hippocrates attributes the gout, even of the
several

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several kinds he has mentioned; but it is very difficult to conceive how bile and phlegm can put themselves in motion, and further what may be the result of such motion, since we have been made acquainted with the circulation of the blood, on which subject Hippocrates has never clearly expressed himself.

Further, from this method of cure, in which only warm and purgative medicines are prescribed, and cauteries, when the distemper is obstinate, one would be led to think, that he admitted a superabundance of humours, which naturally must produce a defect of motion in the humours in general. Accordingly a mixture of bile and phlegm is so far from being the cause of the gout, that it is rather a separation of these two humours. Further, to admit of such a cause, this mixture should produce the gout only, and not any other distemper, which is not agreeable to his opinion.

One

One reflection still remains to be made on this author's method of cure, which I very much approve of; namely, that he allows very different remedies to be made use of, and strongly exhorts to the prosecution of those which appear to have been successful. This induces me to think, that in his time, experience and observation had not yet ascertained what were the most proper remedies for curing this distemper; perhaps it was then not very common, nor might the cause of the disease have been truly known; which I do not suppose without reason, his immediate successors having openly declared it:

Opinions of the Ancients.

Tho' Galen is not the first after Hippocrates who has mentioned the gout, yet being known as the great commentator of this father of physic, the precedence in this class belongs to him, and the rather, as in his account of this distemper, he is far
more

more minute and exact than his predecessors, * and his opinion has been generally followed by his successors †.

1. Galen allows of only one efficient cause of this distemper, which he calls a defluxion on the parts affected. He totally excludes the acrimony of the humours, because he believes it can arise only from a ficcidity, and that this ficcidity can never be productive of the gout. 2. As a proximate cause he admits of the superabundance of different humours, but at the same time denies the weakness of the articulations; believing that this weakness being permanent, the gout would not intermit. 3. As to remote causes, or those which may contribute to cause this superabundance, he mentions very many, and

* Afclepiades, Celfus, Andromachus, Cælius Aurelianus.

† Oribafus, Ætius Paulus, Alexander de Tralles, Æginettus.

insinuates that nothing has a greater tendency to produce it, than crudities in the stomach, intemperance in eating and drinking, indolence, want of exercise; and insists more particularly on the too frequent use of venery, because he had perceived, that children, before the age of puberty, were never afflicted with this distemper. He farther adds, that if the gout was not so common in the time of Hippocrates, it might be owing to the greater temperance and reservedness of their lives, and especially because they were less libidinous.

In consequence of these alleged causes, he uses corroborating topics, mostly repellents, for removing the first; bleedings and purgatives for destroying the second; having, he says, by one or other of these remedies cured several persons. Lastly, he advises abstinence, temperance, and exercise, for discussing the remote causes, and pre-

preventing the superabundance of humours.

But how is Galen consistent with himself? Would not one imagine that by repercutients he intended to remove the weakness of the articulations, a cause he does not admit? Moreover, bleedings and purges are the most approved remedies for redundant humours of all sorts. Are not œdemas, dropfies, and several other distempers too tedious to enumerate, derived from a superabundance of humours, generally proceeding from crudities in the stomach? So that this superabundance may be complicated with various depravations. But further, in what must this particular depravation consist, to produce the gout rather than any other distemper? What is its nature, character, quality? This is the very thing wanting to be known.

The same objections lie against his remote causes; intemperance and idleness
are

are equally sources of mischief both in the physical and moral world; but the methods by which the mischiefs so produced are to be removed must be as different as the causes by which they were occasioned.

Tho' Galen insists very much on excess in venery, it may be doubted whether of itself it can be productive of the gout. Can it be conceived that this secretion, tho' even forced, can tend to increase the humours? The hypothesis is irreconcilable to reason, and daily experience abundantly contradicts it, as shall fully be shewn in its proper place.

Tho' Galen's successors have considered the subject more diffusely, their sentiments are almost equally unsatisfactory. Aëtius agrees in general with Galen as to the efficient of this distemper; except that he adds the weakness of the articulations, and has augmented the number of remote causes; his attention is principally directed
to

to the treatment of the patient according to the different degrees of his pain, without endeavouring to extirpate the gout. He specifies four kinds of the disease, the sanguineous, the bilious, the atrabiliarious, and the phlegmatic. Each species has its respective characteristic indications, and particular appropriate remedies, nearly the same as those prescribed by Galen, except the *Hermodactyls*, which he boasts of as an universal specific remedy, effectual in all kinds.

Alexander Trallianus, who was posterior to Ætius, complained, that in his time the gout was looked upon as an incurable distemper. He says, and justly, that after all the enquiries made on this subject, the true cause is not yet known; that nevertheless the distemper, in its own nature, is easily cured in the beginning; and farther, that it is not impossible to conquer it, even when grown inveterate. From hence it might have been reasonably expected,

pected, that he would have proposed the means of attaining the knowledge of this, as yet undiscovered cause. But no; he follows *Ætius* step by step as his preceptor, and if he excels him in any thing, it is only in the number and variety of prescriptions which he had tried during the course of a pretty successful practice. It must, however, be admitted that he has come much nearer the point than others, especially in the treatment, having distinguished the remedies proper to effectuate a radical cure, from those that were merely palliative, of both which he has given a catalogue.

Lastly, according to these two authors, the *depositum* on the articulations, is occasioned by the superabundance of humours, and the weakness of the articulation where the defluxion settles. But what must be the quality of this superabundance? Why does this settlement happen at the extremities, rather than in any of the viscera, which,
from

from their texture, are weaker, and less capable of resistance than those organs, that are continually strengthened by the vigorous exercise to which they are appropriated? This therefore may be sufficient to vindicate the rejection of an opinion, repugnant to reason, and unauthorized by experience.

It will be needless to spend more time in examining the sentiments of the ancients*; the rest having, without any essential difference, exactly followed the preceding authors.

* Oribasius, Paulus Æginetta, Actuarius, Deme-
trius Pepagomenus, Mercurialis, Zacutus. All the o-
ther Arabian authors, and, among the moderns, Sy-
denham.

C H A P. II.

Opinions of Paracelsus, and the Chemists.

AT the head of this class I think it proper to place an author, who, if he has not thoroughly treated of the gout, yet had a large share in the revolution which happened with regard to the practice of physic. Defluxions falling on articulations are no more heard of; the bile, phlegm, and many other humours are exploded; the gout is imputed only to a particular vitiation of the *Synovia*, a term at that time new, and which signified the liquor appointed for lubricating different articulations, especially such as are exposed to violent motions. The author of this alteration was Philip Paracelsus, who taught that the gout was nothing more than the acrimony of the *Synovia*. This acrimony, according to him, irritates the parts nearest the articulations, and consequently

requently occasions very sensible and acute pains. But a singularity in his opinion is, that in the distinction which he would have made between the pains of the gout and those of venereal distempers, for which he assigns the same cause, he intimates, that the pains of the gout are more acute than in the other distemper, tho' the acrimony be less considerable in the former than in the latter. The only reason adduced by him is, an antipathy in the Synovia, to every thing heterogeneous to it. This reason, without going too far, I may affirm to be too vague and general; for what organical part of our body, what kind of humours contained in it, are not embarrassed by heterogeneous bodies, that nature does not require the expulsion of? What efforts does it not itself use to attain it, without the help of art? Paracelsus gives himself little trouble about the manner in which the synovia contracts this acrimony, he enters into no details, nor does he lay down any method of cure. So that all the

advantage, with regard to this distemper, that can be gained from his writings, is, so exact a knowledge of its seat, that, in this particular, all other authors have followed him.

Van Helmont, who glories in being a disciple of Paracelsus, gives the reader to understand, that his master was able to cure the gout, tho' he has not spoken of the method. He also owns that he has not assigned the true cause, and, in consequence, his own thoughts were engaged in the discovery of it. But let us see if he has succeeded any better.—He begins by refuting the opinion of those who attribute this distemper to defluxions or depositums, which he calls catarrhs; and pretends, that the gout being hereditary, no such cause can be admitted; as any heterogeneous substance contained in the semen would entirely destroy its fecundity, so as to render it noxious to propagation. But he immediately contradicts himself in giving

giving his own opinion of the cause, saying precisely that the semen may contain the germ of the gouty humour, or rather its impression. Indeed, to guard himself from the reflections he casts on others, he informs the reader that this germ remains a long time inactive and dormant as it were, till having acquired a certain degree of maturity, it declares itself by a first fit. In fine, these are his very words, The character of the gout remains in the semen as in a first life during which it sleeps like a swallow in winter till the first fit.

This character is an acidity which, tho' resident in the semen, does not infect it; nature being intent, to continue it in its perfection, and therefore it causes itself to be felt in the synovial humours, which are the most analogous to the semen, and with which this acidity should have the greatest affinity.

On this hypothesis, Van Helmont endeavours to account for the principal phænomena attending the gout; and his specious manner of reasoning has gained him many followers. But he has omitted giving any proof or explanation from whence this acidity could proceed, the cause of which he attributes to different excesses without naming them, and thus falls under the same censure with all the authors who have preceded him. He should at least have described this venereal acidity he contends for. It is also without any shew of reason that he supposes the germ of the gout to lie dormant in the semen, since he says the contrary of the scorbutic and other germs, which should not be if any heterogeneous matter in the semen render it unfit to perform its natural functions.

He pretends that to cure the gout, the maturity of this acidity is not to be waited for; but that it should be destroyed in its principle, by means of the coralline arcanum,

num. He gives no description of it, saying only that this arcanum is metallic, has the colour of coral, and the taste of honey, and its essence is comparable to that of gold.

Sennertus also attributes the cause of the gout to an acidity; but, at the same time, finds fault with the opinions of Paracelsus and of the other chemists, who, in imitation of Tachenius, make the gout to proceed from a mere effervescence of the synovia, occasioned by an acid. I therefore thought it deserved a separate examination, not only as characterizing the kind of acidity, but also indicating the vehicle, that is the humour, with which this acidity ought to be most homogeneous. He delivers his thoughts in the following manner. It is from the aliments only which man makes use of, that the gout proceeds; and of these aliments the greatest part are supplied him by the earth, which communicates to them its principles.

ples. That most commonly communicated is a vitriolic acid, which however changes in the circulation of the vegetable, and forms a tartarous salt, which passes from the plant into the eater of it. The foundation of this reasoning is, that of all known plants, the greatest proportional quantity of tartareous salt is found in that which produces wine; and farther, that of all vegetable juices wine is that which most contributes to bring on the gout.

He was not, however, ignorant, that there are some kinds of wine, which tho' the acid and tartar are found in the analyses of them, are little adapted to produce the gout; but the principle of this acid, says he, was not a vitriolic acid; for observing the climate which produced these wines, they are easily seen to be the growth of a light sandy earth, and therefore contain very little acid; whilst other wines are produced in clayey, muddy, stoney, talcous,

talcons, and gypsous soils, or in such as contain some minerals, all which abound in a vitriolic acid.

I cannot see why Sennertus should think the gout was derived from a vitriolic acid of plants, in which no acid of that character is perceivable. I may the more confidently take upon me to differ from his opinion, as I can demonstrate that the wines which contain a greater quantity of acid than others, are those very wines, which, so far from causing the gout, may, on the contrary, prevent it.

Lastly, according to this author, the vehicle of this acid is not the aqueous part of the blood, tho' salts dissolve more easily in water than in any other fluid; but the serous, which is the thickest part. The reason he gives for this is, that the aqueous part, from its simplicity, is not of a pungency to produce the sharp pains of the gout; that they require a more compound

pound menſtrum, and he prefers the ſerous part of the blood to other fluids. But he is ſilent, with regard to what he means by the ſerous part; all he ſays is, that when this ſerous part charged with acidity, ſeizes the articulations, it may draw on them the other humours, as bile, blood, phlegm, &c. That it is theſe humours which form the tumours on the articulations in a fit of the gout. He might be credited were not the tumours ſo eaſily formed, and did not they, as quickly, change their ſituation.

As moſt of the chemical authors, poſterior to him, have looked upon this ſyſtem as defective, the bare expoſition of their opinion will, I believe, ſufficiently ſhew that Sennertus, tho' his ſyſtem is not improbable, was unacquainted with the true cauſe of the gout. Indeed thoſe modern authors, who could not but acknowledge, the indigeſtions and crudities of the ſtomach to be the moſt general remote cauſe,

cause, were thoroughly aware that their effects would extend to the whole mass of humours, and not infect any one in particular. For this reason they held a proximate cause of the gout to be a particular fault in the blood, which is the source of all the humours. This fault, according to them, is an acrimony more particularly residing in the lymphatic part of the blood, occasioned and supported, by any kind of lixivial salt, whether fixed or volatile.

The opinion of Sylvius de la Boe is this. He enters into no detail of the methods by which the blood may be corrupted; nor does he acquaint us how these salts can be conveyed into the human body.

He has, however, succeeded no better than others. These salts must either be naturally in the body, as if they were integrant parts of it, or conveyed into it by the aliments. But the salts drawn from
 animal

animal bodies are well known to be rather a product of art than nature. Besides they are all volatile, none of a fixed nature being found among them. Again, were these salts conveyed into the body by the aliments, those who live only on vegetables, would be more subject to the gout, than those who eat little or none of them; yet the contrary is well known. For the *gumens* abound in salt, but which undergoes a great alteration in digestion, and, as the ancients say, minerals alone can withstand the action of the stomach, and be circulated with our humours unchanged. Now in all the aliments and liquors, most suspected of a tendency to the gout, not the least vestige of them is to be perceived.

The result of all these opposite opinions is, that an acid, or acrimony corrupting the humours, must be received as the cause of the gout; but without any demonstration, that it is really the cause of this

this distemper; on the contrary, they may be said to have no share in it; and it is for this reason, that several authors have abandoned this system, and exerted themselves to attain, by some other method, a knowledge of the true cause of the gout, as I am now going to shew.

CHAP. III.

Opinion of FERNELIUS.

Fernelius, rejecting all the foregoing systems, as far from giving satisfaction, and not accounting for the many quick and subitaneous changes which are known to happen in the gout, applied himself to form a new one, by which these phænomena might be accounted for. In order to this, he places the only cause of the gout in phlegm; this phlegm is not that which has its source within the head, as was then thought, it having no other way of reaching the parts affected
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by the gout but through the vessels, which was looked upon as impossible; but a phlegm, whose source is in all the external parts of the head, and which he brings down into the articulations by a passage of his own invention, lying between the skin and the flesh, throughout the whole circumference of the human body; the passages, says he, being there very large and easily yielding.

But this system has met with many opposers; even the most implicit disciples of Fernelius have been forced to abandon their master's principles. To dispatch this system in a few words, I shall observe, that Fernelius stands alone in admitting, the only cause of the gout to be the phlegm, descending from the external parts of the head, and likewise with regard to the passage he assigns to it.

However I think all the authors who declare for phlegm being the cause of
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the gout, may be ranked in his class, whether this phlegm be both inward and outward, whether they find out other passages whereby it may reach the articulations; it is sufficient for me that they absolutely hold the only cause of the gout to proceed from phlegm, from whencesoever they derive it. Some derive it from all parts of the head, some from the stomach and liver, and others from all parts of the body; but all agree in appointing the veins or arteries for its circulation. Which way so ever they turn themselves they are all short of the mark they aimed at. Any other distemper, equally with the gout, may be caused by this phlegm. And thus I dismiss a system founded on so uncertain a basis, generally accounted chimerical, and totally banished from the colleges and practice.

It is otherwise with the opinion of those, who, like Sanctorius, look upon the want of perspiration as the most general cause

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of the gout. In this they seem countenanced by daily observation, as those who are subject to this distemper feel the fit coming on almost at the same instant that their perspiration has been intercepted. This deficiency of perspiration may forward the fits in a gouty person, as it will easily fix a pleurisy or peripneumony in a person whose breast has been previously affected; but it ought not to be inferred from thence that an obstructed perspiration was the first cause. This opinion therefore I think I may justly reject, as contrary to experience.

But who in reality are the persons most exposed to the distempers proceeding from a defect of perspiration? Are they not mechanics, or those of laborious occupations? Yet these are the persons whom the gout seldom attacks. This opinion may therefore be rejected with even more reason than that of the ancients and the chemists, as it does not indicate the cause of the
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gout; and the physicians are so far agreed, that one only can be admitted which is of so singular a quality as to produce this distemper and no other.

CHAP. IV.

Opinion of BOERHAAVE and the Moderns.

TO the happy discovery of the circulation of the blood, the art of healing is indebted for a more clear knowledge of the causes of distempers; especially of that now under our consideration. The difficulties which attended the discovering of sources for the matter which produces it, and the course it takes, are removed. That which nature has given it has been acquiesced in, and the mechanism of the human body being better known, the mechanism of distempers, also, by a necessary consequence, is become more certain.

Tho' Boerhaave be not the first who has shewn the course of the gout, yet the whole honour is due to him, from his having extended this mechanical principle to all diseases. As there are few persons who have deserved more highly of physic than this great man, I readily attribute to him the glory which the opinion he has embraced deserves, tho' not absolutely his own.

The proximate cause of this distemper he makes to be a vitiation of the most minute nervous parts, and of the fluids with which they are humectated. The vitiation which he attributes to the fluids he makes to consist in an adventitious acrimony, and a tenacity or viscosity: that of the solids, in a too great rigidity; to which he also adds the too small diameter of the vessels. On this last cause he seems to lay a great stress, insinuating that if the gout indicates itself principally in the parts most remote

remote from the brain, it is on account of their firmness, rigidity, and the exercise to which they are subject, they make the greater resistance. Besides, this proximate cause, according to him, is derived from bad digestions, the result of which cannot be made use of by nature for repairing the nervous fluid, as it rather corrupts it. He even thinks, that an investigation of the remoter causes, necessarily leads to this way of thinking. In fine, when the gout declares itself, it is to be presumed that all the concoctive functions are vitiated. This vitiation being scarce sensible either in the large vessels or in the fluids, is the reason why the gout has hitherto been so difficult to be cured.

His method of treatment is founded on two principles, 1. The vigour of the viscera is to be restored by corroboratives. 2. They are to be freed from the acrid humour contained in their vessels, or lodged in the articulations. For destroy-

ing this acrimony he orders the patient alkaline salts, especially those which are volatile, in small doses only, to excite a proper moisture. Lastly, he would have it evacuated by remedies proper for expelling ferosities, but quickened by mercurial preparations. He further adds, in order to a just application of the remedies, it is necessary carefully to attend to the remote causes of the gout; and also to have regard to the age and constitution of the patient.

I cannot, in part, withhold my assent from Boerhaave's opinion. The too great tenacity and viscosity of the juices, and the diameters of the vessels appointed to convey them, now too much contracted by this depravity, are sufficiently demonstrated by experience and observation. This mechanism is too palpable; it removes all objections which might otherwise be made against this manner of reasoning.

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It is not so with regard to the productive cause of this viscidty. That it is not in any manner derived from bad coctions or digestions may very reasonably be presumed; those who are frequently afflicted with the gout being, in general, of a good constitution, and, in other respects, enjoy no bad state of health, which would not certainly be the case, had they been affected with such a disorder of the digestive functions, which, according to this author, is such an essential preliminary to the gout.

Much more easily may the disorder which then declares itself in most of the functions be proved to be a consequence of the gout, being perceived only during the time of a fit, than the gout to be the effect of these disorders.

Thus Boerhaave was very well acquainted with the depraved state of the juices which causes the gout, as it is easily perceived

during the fits; but he is very far from having explained the cause of that depravation, unless it be said, that acrimony alone is sufficient: but according to him this acrimony, which is of no particular character, shews itself only by the violent pains during the fits. Why may not the same pains be imputed to the tension of the fibres, the dilatations of the vessels, by containing a disproportioned quantity of fluid, and which of necessity must distend them? Besides, the acuteness of these pains proceeds only from the exquisite sensation of the vessels, which must be imputed to the great number of nerves of which they are composed. This explanation appears more natural as it is purely mechanical, and therefore a better can hardly be given. Not that I am for excluding totally *acrimony* from the gout; I own that it may exist in such cases; I am even persuaded that it sometimes does, especially in that kind which is not accompanied with large swellings. But I think this
acrimony

acrimony arises only from a too long stagnation of the gouty humour in the parts affected; and that, like many others, it contracts this distemperature from a want of motion and circulation.

In the course of the cure our author recommends purgatives, which do more service by the irritation they cause on the nervous parts, whose elasticity they increase, than by the copious evacuations they procure; for, in the latter case, they may be compared with sudorifics, which, so far from attenuating and breaking this viscosity, rather contribute to the inspissation, divesting it of the little serum which serves as a vehicle.

In this opinion I include that of almost all modern authors, and even those of the present time, as differing only in the terms in which it is delivered; as instead of the words viscosity or tenacity, some have substituted the thickening of the blood, especially

cially the lymphatic part, sometimes with, and sometimes without acrimony. Some, and these are the chemists, pretend that this inspissation is the effect of a mineral acid, and that the extreme obstinacy of the disease is owing to this acid. These are the principal systems which have appeared relating to the gout. Having already examined these last reasons, I shall not enter into a larger detail of the more recent systems, in order to avoid the tediousness of frequent and jejune repetitions. I should be justly censurable, were I longer to insist on a matter which is of no great utility, while things more necessary and interesting remain unknown.

PART II.

CHAP. I.

History of the Gout, and of its Progress.

MY motive for attempting, in this work, a history of the gout and its progress, is, because it seems to me the only distemper, which has attacked mankind insensibly and by degrees. For of all distempers, some were felt, even from the first, the same as at present, as all the inflammatory distempers, the different fevers, &c. and if others have undergone any alteration it has been for the relief of mankind; either by being more rare, as the leprosy and elephanthiasis, or less violent, as the venereal distemper, and perhaps all which depend on a extraneous viti-
tation, which has infected the mass of humours. The gout, on the contrary, has began insensibly to make itself known,
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and seems to have passed thro' a long series of centuries before it was able to lay mankind on the rack, and make them feel those excruciating pains, of which it has not only increased the violence, but also extended them to much more considerable numbers. It may possibly be imagined that the character of the gout does not discover itself at once; that it becomes worse and more dangerous, as it has taken the deeper root, and in proportion to its antiquity. But the contrary is proved by the history of its progress. It is at present the very same as at the first instant of its appearance; but acts very differently, and this merely from the fault of mankind.

In the time of Hippocrates, the character of the gout appeared the same as it now does to us, so many ages since; that is, that in the part affected it produced the same symptoms, and with the same obstinacy, as it does at present. The whole difference at
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present (I insist) lies in the greater number of parts and persons at present affected. If the gout is more to be dreaded and more dangerous than formerly, it is only as it attacks more noble parts, and more necessary to life, than at its beginning.

The only kind of gout Hippocrates was acquainted with was that which affected the different extremities, as I have shewn in the first part; yet, adds he, it is of very long continuance, tho' neither dangerous nor mortal. Eunuchs, women, and young persons, who are strangers to venereal pleasures, he says, are not subject to the gout; by which he seems to impute the only cause of this distemper, to an excessive use of those very pleasures; and from hence, occasion has been taken to attribute the few instances of this distemper in his time, to the moderation and virtue of his age and country, as I have before observed
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from Galen. But I can by no means subscribe to this reason; I dare even to affirm the contrary, from a certain proof in Hippocrates himself, that his age knew little reserve in matters of love, when he is describing a distemper known by the name of *tabes dorsalis*, which I shall here translate a lumbar consumption, and by assigning the too frequent use of the venereal act for the cause of this consumption, he intimates that this kind of excess was not uncommon in his time. Thus chastity was not the virtue of the age of Hippocrates, and, consequently, the few instances of the gout, in those times, cannot, with any solidity, be attributed to their extraordinary continence. A better reason must therefore be looked for, and Galen himself furnishes it in another place, to the following purpose.

In the time of Hippocrates few persons had the gout, which was owing to their tem-

perance in eating and drinking; but our times, continues he, see the quantities and varieties of dainties so excessively multiplied, that any farther addition seems impossible; and it is this which has rendered the number afflicted with the gout almost infinite; the very eunuchs, tho' incapable of venereal pleasures, are not free from the attacks of the gout, and women, before the cessation of their periodical discharges, bring it on them by their excesses, indulgence, and want of exercise.

The character of the gout being evidently the same among all gouty persons, and in different countries, it must be the effect of one and the same cause. It is therefore with good reason that I reject an immoderate use of venery as the cause of the gout; seeing eunuchs have not been always exempt from this distemper, nor has the same cause ever been assigned for its afflicting the fair sex. Lastly,
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intemperance in eating and drinking, has been looked upon as the only cause of the gout ; but may not the same cause give rise to it also in men ?

The prevalence of intemperance, according to Galen, greatly contributed to spread the gout. He further adds, and Cælius Aurelianus says the same, that ancient physicians held the gout to pass from fathers to children, and that it was become hereditary. This Galen proves as far as the case admits of proof, affirming that he has seen gouty persons, who so far from being chargeable with any excess, had always observed an exemplary sobriety ; but that, unfortunately for them, their fathers or ancestors were gouty, and thus probably the semen had been corrupted, or at least infected with the germ of the gout.

But intemperance and propagation are not the only causes mentioned by Galen
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of the progress of this distemper; from the improper use of topics, most of them repellents, he observed at that time, extraordinary consequences in the gout; which induced him to say that they ought to be administered with great caution. Tho' the cause of the gout was admitted to be a vitiation of the juices, yet it was treated as purely local, and to be eliminated by topics, or, that the use of them would, at least, procure some relief. This method of treatment, instead of relieving the patients, often brought their lives into imminent danger; the gouty humour lodged in the extremities being driven from its stations by such applications, removed and fixed itself upon the lungs, whence the patients were suffocated before they could receive assistance; or rather the distemper being arrived at this height, the patients were given over, either because this effect was then unknown, or the first discovery insufficient to point out the method of cure.

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This kind of repelled gout, which gave rise to that sort of irregular gout, called the translated gout, became more frequent in the times of Oribasius and Ætius, notwithstanding its fatal consequences. Alexander Trallianus says, that in his time the gout was very much to be feared, very dangerous, and at the same time so obstinate, that it was called the disgrace of physic. He seems to acquiesce in this prejudice, by shewing, that till his time the true cause had not been known, and he himself does not explain it. All his reason for advancing this assertion was, that the physicians applied hot and repelling remedies, as if the gouty humour was cold, and he himself applied only emollients, as if, on the contrary, the gout was hot.

Yet he himself, after the recrementitious humours, from all parts of the body, are sufficiently evacuated, permits astringent and repulsive remedies. He adds, that
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by proceeding in this manner, the suffocation, so common in his time, is not to be apprehended; the metastasis of the gouty humour being by that means prevented. But if he shews the means of preventing the translation of the gout, he does not say a word on the method of treating it, when it happens.

Paulus Ægineta is the person to whom we are indebted for this, who explains it in the following manner: every time the gouty humour settles on, or attacks any part more noble than the extremities, all endeavours must be used for recalling this humour to the extremities, otherwise a fatal suffocation will ensue. He does not however give entire satisfaction, for in his whole book there are no methods laid down for obtaining this end; he mentions no remedy, then known to be proper for promoting this revulsion, this desirable change, which must be effected with the utmost expedition.

However it be, the history at present under consideration, is greatly enriched by reading his treatise; he not only mentioning the gout repelled or translated by the application of repellent topics, or by the too long continued use of hot medicines, but also several other species of irregular gout. In his enumeration of the parts subject to the gout, we first meet with the articulations of the trunk of the body, of the ribs, and of the jaw. He speaks of them in such a manner as shews these phænomena were very rare; it is a kind of gout which the modern physicians have distinguished by the name of *wandering*. He adds, that some have felt the effects of the gouty humour in their ears, throat, liver, and spleen, which last I shall call self-translated gout; for tho' these two kinds are felt only by persons who have been previously afflicted with the regular gout, yet they are very different from the accidentally translated gout mentioned by Galen, this being
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purely the effect of topics ill-applied, and the others take place independantly of any kind of topics whatever.

There is still another species of irregular gout of the same kind as the two last, called by modern authors the *indeterminate* gout; the gouty humour offering itself to almost all the parts of the body, and threatening them all alike. To be apprehensive of this kind, it is sufficient to have been afflicted with the regular gout; but at the same time it is not necessary to provoke it by medicine, as any application seldom fails of turning it off; and it is a great happiness if the distemper does not thereby become more dangerous by fixing totally on some noble and vital part.

Lastly, I must not omit a kind of irregular gout, and properly so called, from its seizing on some of the noble parts, particularly the lungs and the stomach, with-

out previously shewing itself in any other part. Yet the persons thus suddenly seized in these noble parts must necessarily be the issue of parents who were afflicted with the gout.

It is not difficult to demonstrate that many asthmatical persons have, at the instant of the gout's attacking them, found themselves relieved from and cured of their asthma. Instances of this kind are not uncommon; but when the gouty humour has affected the stomach it is not so. I have never, in any author, met with an observation ascertaining the cure of the complaints which are the consequences of such attacks, by removing the matter to the extremities; but I can produce two instances of persons perfectly cured by means of remedies proper in the cure of the gout. These remedies had been prescribed them for no other reason than from their being the offspring of gouty parents. I shall speak more fully of them, when I come to treat particularly

ticularly of this kind. This is the whole progress made by the gout since its first commencement. All authors unanimously agree in ascribing the cause to misconduct, either in the regimen, or by improper remedies, which last I have already taken notice of. All that remains is to shew the principal evils which arise from a want of regimen, which I shall do with the greatest perspicuity, after recapitulating the different progresses already specified, and which I shall fix at certain epochas, that every one may be informed of the time this distemper has taken up to arrive at its present state.

1. The gout in its infancy, that is, in the time of Hippocrates, about five hundred years before the christian æra, attacked only the articulations of the extremities; tho' painful, it was neither mortal, dangerous, nor very frequent; intemperance at that time not being so much in vogue.

2. During the ages between Hippocrates and Galen, the physicians perceived the gout to descend from parents to children by propagation, that it became hereditary, because they observed that children who had not deserved it by any debaucheries, were seized with it. At present this is an undisputed truth.

3. That course which the gout had already taken, was what induced Galen, about the end of the second century, to admit this cause among those to which, in his time, was attributed the frequency of this distemper, which he so bitterly complains of. For at that time eunuchs and women were attacked by it; which he attributes to the enormous intemperance of his age, such as seemed incapable of addition. Hitherto the gout shewed itself only in the extremities, and had a determinate progress; but Galen, for the first time, observed an irregularity in its progress, occasioned by the removal of the gouty matter from the

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extremities to the lungs. This removal produced a hasty suffocation. Thus we have a gout not only more frequent, but even more dangerous; this species is called a gout accidentally translated.

4. All the authors of the fourth and fifth century pretty well agree with Galen, and mention this irregularity in the gout; they even relate that the suffocation occasioned by the removal of the gouty humour to the lungs, became every day more common, from the improper treatment practised in the regular gout.

5. Paulus Ægineta, who lived in the seventh century, mentions other irregularities, viz. 1. That this distemper attacked not only the articulations of the extremities, but also those of the trunk of the body, the ribs, and the jaws. 2. That without any removal of the gouty humour by repellent topics, this humour affected in some persons, the lungs, the
liver,

liver, the throat, and the spleen. The first of these irregularities is at present known by the name of the wandering gout; to the latter I give the name of self-translated gout, as not being caused by the applications of topics, like that mentioned by Galen.

6. To conclude, during the later ages two kinds of irregular gout had been perceived; the first called indeterminate, all the external parts of the body being equally threatened with an attack; the second is the irregular gout, properly so called, which is entirely the fruit of an hereditary gout. The gout, in its different stages, has been generally, and on good grounds, attributed to the different debauches which have succeeded one another in a daily multiplication; but these debauches, these excesses, may equally occasion all sorts of distempers. So that it still remains to know which kind of debauch is of a more
gouty

gouty tendency than others. Little more insight is to be found in those authors who maintain, that this distemper, even when not hereditary, may be caused by intemperance in eating and drinking, they having omitted giving any clear and express declaration of the quality which these foods and liquors must necessarily have, to bring on the gout, and not any other distemper. Those among them, who have taken it into their heads to decide this point, have fallen into an error; they attribute to the aliments and liquors a quality which is not found in them. Besides, if this quality which they require be found in great abundance in certain kinds of food, it is precisely in those, which, so far from causing the gout, are, on the contrary, rather preservatives against it.

C H A P. II.

Character of the Gout.

PReviouſly to the indication of the true proximate cauſe of the gout, it will not be foreign to the purpoſe to delineate the character of this diſtemper. It has always appeared ſo ſingular, that, by the variety with which it is ſometimes accompanied, it has deceived the greateſt part of phyſicians.

1. The gout, in general, ſeems to delight in attacking perſons of a liberal education, and who live in opulence and inactivity. It ſpares the wretched, and thoſe who ſupport themſelves by laborious callings.

2. Some perſons there are who live in ſplendor and eaſe, yet never feel any thing of the gout; whiſt it harrasſes the poor,
and

and those who are obliged to undergo the greatest labours and fatigues.

3. Among the number of gouty persons, many with reason attribute their distemper to their having made too liberal a use of wine. On the other hand, there are others, who so far from having indulged themselves in any intemperate draughts of this liquor, have strictly abstained from it during their whole lives; yet are tortured with this distemper, tho' it could not be hereditary in them.

4. In some climates, very few escape the gout; there are others again where this distemper is almost unknown.

5. There are aliments and liquors in which excess greatly contributes to increase the gout; whilst there are others of the same kind, and sometimes of the same species, especially drinks, which have no such tendency.

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6. Tho' persons of a sedentary profession, have lived with sobriety, they are more susceptible of the gout, than those who, together with excesses and debaucheries, use a great deal of exercise.

7. Upon the whole, the most chaste, the most sober persons are sometimes not exempt from the attacks of the gout; whilst others, who have revelled in every kind of debauchery, are strangers to it. These are not all the phænomena relating to the gout; for there are others much more extraordinary, when it is the fruit of propagation, that is, when it is hereditary, and descends from father to children. For
 1. Children begotten by an aged father, are more subject to this distemper, than the issue of the same father, before he had felt any symptoms of the gout. 2. It is not a necessary consequence that a child begotten by a gouty father shall have the gout, the world abounding in instances of persons who never have any symptoms
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of this distemper, tho' their fathers were extremely tortured by it. 3. Children, exempt from the gout themselves, transmit it to their own children. Sometimes this malady shall, as it were, intermit its force in the father and the children, to shew it with the greater violence in the grandchildren. 4. In some it is felt much sooner than in others. In fine, when hereditary, it sometimes happens, that for the first time it does not appear under the regular, but under an irregular form; and this is the more to be feared, as it is very difficult to be aware of it.

By this narrative it should seem no easy matter to preserve one's self from the gout, all persons being indiscriminately attacked by it: no state, no condition, no calling, no kind of life affording a security against this distemper. Besides the difficulty of properly treating it, from its appearing to arise from different causes; yet I presume to assert, that it is one, and the same cause
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that produces it in all gouty persons. The acquired and hereditary gout may possibly seem to admit of a difference: but there is none; I repeat it, the cause is the same in both kinds. But to close in a few words, this cause can be resident only in gouty habits, and so peculiar is it to them, that there is no reason ever to suspect it in such as are not gouty. If it be discoverable in the fit of the distemper, why should we not acquiesce in it? Why is recourse to be had to another chimerical cause, the existence of which cannot be demonstrated?

C H A P. III.

Of the Cause of the Gout.

IT is agreed, by most authors, to admit of only one cause of the gout, but not one of them has hitherto discovered this cause; and this has produced such a multitude of systems relating to this distemper. Every one has applied him-

himself to forming an hypothesis, by which to account for such phænomena, as were impossible to be solved by the system he opposed; but without perceiving that his own laboured under the same defects, for which he reproached others. I own, however, that those who have assigned excess in liquors and solid aliments to be the cause of the gout, are partly in the right. I agree with them in admitting the same cause, and only differ from them with respect to the particular qualities of these foods and liquors.

The true and only cause of the gout, I maintain to be the use made of liquors and aliments, which contain too great an abundance of mucilage: nor is it necessary to have recourse to debauchery and excess; this cause alone being sufficient to account for all the different phænomena which attend the gout; with the further advantage that it is distinguishable by every one af-

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fiicted with this disease ; for that the gouty humour is a real mucilage, may sufficiently be proved from even the sight and touch of it.—It has the same consistency, the same transparency, as other mucilaginous humours. It has also a tenacity, viscosity, or fizy quality, which glues together the parts in contact ; a peculiar effect of mucilages. By mucilage I mean a mixt body, compounded of very little oil, a great deal of earth, and a very large quantity of water and air ; and which, consequently, is viscid and glutinous.

Here, indeed, would be the proper place for demonstrating that this mucilaginous matter resides in the very aliments generally used by gouty people : but the proof of it requiring an extensive discussion, I shall refer it to the following chapter ; and here, which is not less necessary, proceed to explain the manner in which this mucilage produces the gout.

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All aliments contain a greater or lesser quantity of mucilage; those also which contain the most are more nutritive than those which contain less. This mucilage appears to be the vehicle of the nutritive particles, that is, of the particles which are to be assimilated, so as either to become organical parts of our bodies, or, at least, to contribute to their support and increase. This mucilaginous matter is of very easy digestion, and can only hurt by its superabundance, which occasions an inspissation in the mass of humours, or in the blood in general. This inspissation is more considerable in the fibrous or lymphatic parts, with which it has most analogy, than in any other.

When this inspissation is become such as to obstruct the circulation of the blood, nature herself endeavours to throw off the incumbrance. The circulation, after being for some time impeded, becomes swifter; the secretions are

F 2 increased,

increased, and especially in the present case, those of the synovial glands; the superabundance deposits itself there, the diameters of the vessels belonging to those articulations being proportioned to this humour; and because there is doubtless in the synovial glands a particular mechanism for this secretion; as there is in the kidneys for the secretion of the urine, and another in the liver for the bile; as may be readily conceived, seeing the humour secreted by the synovial glands, is purely mucilaginous.

Hence it appears that the gout is occasioned merely by a superabundance of lymph, too much inspissated by mucilaginous substances, which nature generally endeavours to free herself from, and this it performs by a kind of depuration.

This superabundance of lymph must arise from good digestions, otherwise it would occasion other distempers, as fevers,

vers, obstructions, inflammatory diseases; as may be easily proved in gouty persons, who sometimes, by their own ill-conduct, and an improper regimen, are seized by one or other of these distempers. What proves that crudities of the stomach are not the chief causes in producing the gout, is, that after recovering, for instance, from a continuous fever, which is only the effect of a bad digestion, a fit of the gout soon follows. The peccant humours, at least the greatest part of them, have, notwithstanding, been carried off by the evacuations excited in order to remove the fever. Tho' these evacuations removed the fever, they have not dislodged the gout, nor even prevented the fit of it. On the contrary, the means employed for the cure of distempers have been found by experience to accelerate the fits of the gout, tho', sometimes, with less violence. Now, if the corpulence generally observed in gouty people, and the no small share of health generally enjoyed by them, be duly considered they

must be allowed to have good digestions, especially when out of the fit.

I am not ignorant that during the paroxysms, gouty persons have generally an universal nausea, which infallibly indicates a depravation of the digestive juices: but this nausea, this depravation, entirely proceeds from the action of the gouty humour, seeing this depravation abates as a gouty humour becomes settled, the organs of digestion soon resume their proper tone without the assistance of medicines, and become again depraved on the next access of the fit; after which they restore themselves in the same manner; unless, that in order to hasten the recovery, medicines were called in, which while they removed the first disorder, corrected or diminished the abundance of the gouty humour at the same time.

In fine, the same happens in the gout, as in many other distempers, which depend

pend on a particular species of virulence. How often has the small-pox been known to follow immediately a dangerous distemper, which has been removed by medicines, and the pustules appear on the recovery from the former distemper. This is still more frequently seen in gouty persons, who almost universally feel some symptoms of the gout during their recovery, or immediately afterwards.

All eruptive diseases are cured only by a depuration of the blood. May not the gout be said to terminate in a depuration? This depuration is, indeed, very different; in eruptive distempers the depuration is carried to the skin; in the gout it deposits itself in the synovial glands of the articulations, or in those most analogous to them. If in the former, the depuration is transferred to any of the viscera, such depuration is so far from relieving, that it often kills the patient. If in the gout the depuration,

or, to use the common language, if the gouty matter attacks the viscera, what ravages does it not make? Is it not to be equally dreaded with the other? In the small-pox, and other similar distempers, are not all possible methods used to force the depuration outwards? And in the gout, especially the irregular, what remedies are not tried for removing it to the extremities and fixing it there?

But it is said the eruptive distempers are caused by a particular virulence, which it is necessary to expel: the gout has never been looked upon as the effect of any such virulence. The objection is plausible; but my answer to it is, so singular is the nature of the gout, that a depravation affecting the whole mass of humours must unavoidably be admitted, seeing it is hereditary. Besides, this depravation produces in the gout the very same effect as the virulence in other depuratory fevers.

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I have affirmed that the gout is only an inspissation of the blood, especially in the fibrous or lymphatic part, occasioned by too great a quantity of mucilage. I suppose I shall not be called upon to prove that mucilages contribute to thicken the juices; a quality inherent in them; they are all known of themselves to tend to inspissation. It is evident that they thicken almost all liquors in which they are dissolved; that this thickening is more easily and speedily performed in liquors that contain more mucilage than others.

Hitherto mention has only been made of the acquired gout, thinking it most methodical to begin with the cause which produces it, as the gout must have been acquired before it becomes hereditary, consequently, the hereditary must be the same as the acquired. Let me for a while suppose it granted, that the cause of the acquired gout is an inspissation of the lymph,

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occasioned by the presence of a certain quantity of an adventitious and superfluous mucilage in the blood; that this mucilage is produced by the aliments which have been made use of. It will follow, that in the hereditary gout there is the same inspissation, but with this difference, that here it is owing to a disposition or tendency to inspissation; but which still retains the nature of the first cause, namely, the mucilaginous character, tho' it be not produced from the aliments. It is sufficient that this character having affected all the humours, that which is destined to the propagation of the juices was affected with it in the moment of generation, and that afterwards the other juices contract this depravation more abstractedly, as in the scurvy and other hereditary distempers; where the virus does not seem to corrupt the semen which was its vehicle, and yet corrupts the humours with which it has more affinity.

It is objected that if the character of the hereditary gout be the same with that of the acquired, all the children of gouty persons would be affected with the gout, which is contradicted by experience; and farther, that those children who never felt any fits of the gout, should not transmit it to their children, seeing there has been no indication of its existence. Must it be concluded from thence that the gout is not hereditary, or, that if it is, it must have a different cause, since it does not act in the same manner? This would be just, if these phænomena, however extraordinary they appear, were not more frequently observed in the acquired than in the hereditary gout. More is not necessary for one kind than the other.

In reality, tho' the gouty depravation or germ always exists in the acquired gout, it does not continually produce its effect. There is no denying that there are very long intervals between the several fits;
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some gouty persons are known even to be able to prolong these intervals, so that another cause must concur with the gouty germ in order to bring on new fits. Now this cause is no other than a superabundance of mucilage, since gouty persons giving occasion for it by their misconduct, are not long without a fit, the violence of which is often proportioned to the excesses they have indulged. This, perhaps, is what has given rise to the proverb, that the gout is the distemper of those who will have it. For the same reason it is that the child of a gouty person often escapes the gout, and his descendants become subject to it; because he had preserved himself from this second cause, either by his discretion or occupation; while on the contrary, his descendants may have chose to live in idleness and opulence, and the indolent enjoyment of the fortune left them by their father.

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The result of the premises is, that the germ of the gout, both acquired and hereditary, is an inspissation of the blood, especially of the lymphatic part, which is of a mucilaginous nature, as I am going to prove; that this germ is not sufficient to produce a fit, without the concurrence of a superabundance; and this superabundance not imbued with any virulence, as otherwise it would produce a very different distemper. But I add, that the superabundance of humours will never give the gout, without the gouty germ exists at the same time. Of this the persons addicted to the greatest excesses without being invaded with the gout are a convincing proof; tho', on the other hand, these excesses bring on more terrible and more dangerous distempers than the gout itself.

C H A P. IV.

The gouty Humour is mucilaginous. This Mucilage is the Product of certain solid Aliments ; but more frequently of some Liquors, commonly made use of by gouty persons.

IT is not sufficient to have shewn that the gouty humour is itself a mucilage, this being very easily perceived during the fits. Of this the most incredulous may be convinced merely by a view of the parts affected. This mucilaginous quality must further be shewn to have affected the mass of humours, the gout not being a local, simple distemper, but depending on a general depravity of the blood.

The proofs of the existence of the mucilage in the humours, are drawn from the state of the pulse in all gouty persons, which is slow, and strikes, to a considerable

ble extent, the fingers which touch it. But besides this symptom, which may be common to other distempers, depending on the inspissation of the lymph, the characters of which are totally different from that of the gout; there is another much more certain, which cannot with any reason be opposed, I mean that observed in the blood drawn from gouty persons, which consists in a whitish matter floating on the surface, almost like that drawn in pleurifies and defluxions of the breast. This colour is owing only to the superabounding fibrous part of the blood, grown into a closer adhesion than it naturally should be; and possessed of a viscosity or sizyness, which is adventitious to it, and which may even be easily felt: a phænomenon peculiar to the gout, and not observable in the other distempers, flowing from an inspissation of the lymph, but very different from that of the gout.

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It is not sufficient to have demonstrated that the gouty humour has a mucilaginous quality perceivable in the part afflicted, and even in the whole mass of the fluids; this mucilage must be traced farther, and I shall endeavour to discover the origin of it, seeing its character is extraordinary and contrary to the order of nature. I have already said that it is the product of certain solid aliments, and still more of some liquids which contain a great deal of mucilage; now this at present requires demonstrative, and, consequently, convincing proofs.

The true cause of distempers is never so easily discoverable as when they are endemial, and sometimes epidemical; because then they can be occasioned only by the unhealthy constitution of the air of the countries where they predominate, the bad regimen of the inhabitants, or a conjunction of these two causes. Any defect in the air is also now more easily discoverable

verable than ever, and thus a greater certainty of the cause of the distemper may be attained when it attacks only some persons in other climates where this distemper is, as it were, unknown. The best and easiest method of coming at the true cause in question, is, in my opinion, to examine it with all possible accuracy in those countries where it seems endemial and epidemical.

As some persons may be apt to call in question this endemial character of the gout, it will not be amiss, before I proceed farther, to prove it from authority and experience. Tho' this distemper was little understood in its infancy, yet Cælius Arelanus relates, that it was very frequent in some countries, and among others in Alexandria, and that part of Caria bordering on the Egyptian sea. Galen also says, that, in his time, some countries were more subject to this distemper than others, but he does not specify them. Sennertus

is of the same opinion, the number of gouty persons being very inconsiderable in those parts of Germany where he resided ; but toward Moravia and Hungary the gout was very common.

But there is no necessity for having recourse to antiquity, or bringing instances from foreign countries, when we have them continually before our eyes. Are not most of the provinces of France, especially Flanders, the Dutchies of Maine, and Normandy full of them ? Throughout all these provinces, no rank, state, or condition are any preservative against this distemper ; whilst, on the other hand, one hardly sees a gouty person in either Burgundy or Champagne.

If the ancients were so struck with this contrast, that they thought it was not to be passed over in silence, with how much greater reason ought we to be particular in taking notice of it, as, in our times it is
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ON THE GOUT. 83

more easily distinguished and more frequently seen? Hence it appears that the gout was not only formerly endemial, but that it still continues to be so. It now remains to examine whether this endemial character of the gout depends upon the noxious constitution of the air, or the bad regimen of the persons subject to that distemper.

I begin with excluding the air; because all distempers which derive their origin from the bad constitution of the air, continue very little longer than that cause exists. Besides the distempers it occasions attack indiscriminately all sorts of persons, without any regard to age; and this depravity of the air ceasing it is very often several years before it returns so as to occasion the same distempers, whilst the gout seems not to be subject to any of these laws. It subsists a long time after its first appearance, it is felt periodically throughout all the seasons of the year, tho' most commonly in Spring and Autumn. It attacks only adults,

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dults, feldom young perfons or children. fine, he who has once felt it, rarely gets rid of it during life.

I alfo declare againft a bad regimen, fo far as it may be accidental. I mean that occafioned by a fcarcity, or the forced ufe of bad provifions; becaufe, in both thefe cafes, the poor always fuffer moft; whereas the gout, on the contrary, rather attacks perfons living in opulence, even during fuch times of calamity. It is then an habitual bad regimen to which the caufe of the endemial character of the gout muft be attributed; and ftill this regimen muft be equally within the reach of the poor and the opulent, as both undergo the fame fate. I make no fcruple to affirm, that this bad regimen confifts rather in the liquid than folid aliments. It will, doubtlefs, be allowed, that the natural and moft common drink of a country, is, at the fame time, that which moft generally obtains at all tables, with the greateft as well as the meaneft.

meanest. It is then in the drink we must seek for the cause we are endeavouring to investigate.

Let us now take a view of the drinks most commonly used in the different countries where the gout seems endemial. In the dutchies of Maine and Normandy it is cyder and perry, in Flanders beer, and in the other provinces wine. Three kinds of liquors in appearance very different, and little analogous one to the other ; yet upon a closer examination of them, it will appear that these three species of liquor when of a nature to give the gout, always offend from the same principle, which consists in a superabundance of mucilage ; for besides the proofs drawn from a chemical analysis, the sight and touch immediately convince one of it. All these liquors are less pellucid than those which contain less mucilage. The viscidty of them is very sensibly felt, by all who touch or rub their hands with them.

But the most convincing proof which can be required to demonstrate the gout to proceed from such liquid and solid aliments, as contain a large quantity of mucilage, is, that the above liquors are the more productive of it, in proportion to the quantity of mucilage they contain. Thus in Maine and Normandy, they who make use of good and strong bodied cyders, contract the gout sooner than those who drink only a small cyder, which, at the making, was plentifully diluted with water. The same difference is observable in Flanders, those who drink strong beer do not long escape the tortures of the gout, whilst those who content themselves with small seldom feel any thing of it.

I presume that it will not be disputed that cyder of a good body, and strong beer contain more mucilage in an equal quantity, than small beer or water cyder. For let a quart of strong beer and as much of small (the same I say of cyder) be distilled,

tilled, the *residuum* of the strong beer or good bodied cyder, will be found to be more considerable by half, and sometimes by two thirds than that of water cyder or small beer. Now this *residuum* is almost entirely owing to the mucilage detached and desiccated by the heat of the fire; because this mucilage being too dense and fixed, instead of rising in distillation along with the other principles, it always remains, at least the greatest part of it, at the bottom of the alembic. This *residuum* is always proportioned to the quantity of mucilage contained in the liquor distilled. It is not so much as necessary to have recourse to chemistry in order to prove the truth of this fact, it is abundantly sufficient to examine the tenacity and viscosity, which is much more considerable in good bodied cyder than in weak, in strong beer than in small: the cause of which must necessarily be attributed to the greater quantity of mucilage in the former than in the latter. The demonstration extends

still farther; of all the common drinks none contain a greater quantity of mucilage than good bodied cyder, and next to that strong beer; and these are the two liquors which bring on the gout more readily than others. Hoffman openly declares, but without giving the reason, that beer causes the gout sooner than wine. I am not afraid to affirm that it is because wine contains less mucilage than beer. This reason must be admitted if the wines themselves appear to bring on the gout more easily in proportion to the quantity of mucilage they contain. The proof of this proposition must render all others unnecessary.

Experience sufficiently confirms the opinion of those who have advanced that sweet wines cause the gout much sooner than others; and these authors might have added the more sweetness these wines seem to have, the greater their tendency is
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to cause the gout. This fact is strictly true, and must be so, as these wines contain more mucilage than others. This the above mentioned experiments will also prove.

It is certain that all liquors causing the gout, contain a certain quantity of mucilage; that these liquors accelerate it in proportion to their abounding in this particular; why then should not the gout be concluded to be solely the product of this same mucilage, seeing it is otherwise very discernable in the humours of gouty persons, and in the parts affected by it? Possibly it will be allowed that good cyder and strong beer, greatly tend to bring on the gout, as this is no more than what is proved by daily experience; but that this is the proper effect of the mucilage they contain, will be questioned; because, on the other hand, they furnish a greater quantity of acids, salts and spirits, than middling cyder and small beer. This I
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do not deny; but if this proposition is to take place, it must also be allowed me, that wine, of all other common liquors, should be the most productive of the gout, as being more replete with those principles than any of the other liquors; yet wine is not the liquor most to be feared for the gout. But what absolutely disarms the adversaries of this opinion without resource, is, that the wines which afford the greatest quantity of acids, salts, and spirits, are so far even from causing the gout in a slight manner that they seem, on the contrary, to prevent it. One would be inclined to think that it is a property annexed to this abundance of principles; since, on the other hand, sweet wines, which have the least quantity of spirit and other principles, tho', in appearance, they seem to have more, are known to be the most productive of the distemper in question.

In reality, of all known wines there are not any from which is produced, by a
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chemical analysis, a greater quantity either of tartarous salts, acids, or spirits, than from those of Burgundy, Champagne and Spain; yet never did any one contract the gout by using those wines. On the contrary all sweet wines as Muscadel, Condrieux, afforded, on an anylization, very little of these principles, tho' they have for a long time since been justly suspected of harbouring the germ of the gout, seeing the drinking of them, brings it on so speedily. Here seems to be a kind of gradation in the different liquors, that cyder is of the most gouty quality, next beer, and thirdly wine. But this is common to all these liquors, that the more limpid and transparent they are, the less mucilage they contain. Secondly, the more froth produced by being decanted from one vessel into another, the more they abound with mucilage; for this froth is the peculiar effect of the mucilage inherent in them. Thirdly, the more mucilage they contain

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in a small volume the more apt are they to bring on the gout.

Hitherto I have considered the gout only in the countries where it seems endemial; but as this cause must be the same with all gouty persons, in whatever countries they live, it can be no other than the product of a mucilage, whatever the principles of it be. There is no difficulty in discovering it in all gouty persons who have made use of the above mentioned liquors. These liquors when transported do not discharge themselves of the mucilaginous matter which is the most fixed and stable, and therefore they necessarily retain the noxious principles inherent in them. The same liquor which in one country is noxious must, in reason, be thought not to be entirely divested of its bad quality by transportation.

It is otherwise in discovering the cause of the gout in persons, who, during their whole

whole lives, have abstained from these liquors. Here these liquors must be laid aside, and the enquiry turned on the solid aliments, whether the same cause do not exist in them; namely, whether the aliments offend by the same substances as the liquors. Agreeable to the plan I have laid down, I shall begin with examining who are the persons subject to the gout in countries where the gout is not endemial; and afterwards, enter into a detail of the most common aliments.

The persons most subject to the gout are especially those of eminent families, who live in splendor and indolence; in allusion to which some authors have stiled the gout the queen of distempers, as it often makes its appearance on the throne, and in persons near it; but very seldom in cottages. Secondly, those, who from their calling or inclination, lead a sedentary life, as studious persons. It spares mechanics, and those who are obliged to earn their daily
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subsistence by hard labour. Lastly, it invades the aged, especially those who have discontinued their customary exercises, whilst those who persevere in those exercises pass thro' life, without feeling any attacks of the gout. Besides, the manner of living of all these gouty persons is generally to feed on succulent foods, and farther, not contenting themselves with their food as nature offers it, they increase its nutrition by the infinite different preparations and seasonings, invented by the enormous improvements of the art of cookery.

If aliments are nutritive in proportion to the quantity of mucilage contained in them, it is not at all strange, that even such as have abstained from all mucilaginous liquors should be liable to the gout. These aliments, without the concurrence of liquors, are more than sufficient to cause the gout. Now the most nutritive foods, or at least their principal substances, may
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be said to be mucilaginous; the extracts of them affording a considerable quantity of mucilage.

What then is to be thought of the jellies, gravies, strong broths, which may be called extracts of them; or, at least, very nearly such. Yet these are the common aliments of gouty persons. Are they then unjustly accused of being high feeders, and dainty, if they are not only nice in their food, but also eat plentifully of such foods as please them? For such is the infatuation for gravies that what few vegetables are seen on their tables, are all seasoned with it; and to such excess is this practice carried, that in some houses the quarter of an ox is daily consumed, and the greatest part of it in seasonings for other dishes.

This enormous practice has given occasion to a witticism, tho' but of an indifferent kind, that the art of cookery has invented a method of reducing the whole

substance of an ox into a meal for a single person. But this is carrying the hyperbole too far.

I shall, with more probability, say that most of these dishes are prepared with a large quantity of mucilage, and purely so. For all these different preparations, which foods from the animal kingdom undergo, for reducing them to a smaller volume, and rendering them more savoury, only drain them of these aqueous parts which enter their composition, and concenter, or to speak more correctly, approximate the mucilaginous particles, and by that means render them more pernicious to health.

It is not therefore at all strange, that the poor, who are not able to procure foods, should be free from the gout. Their health is envied; but their distress, which preserves them from the tortures occasioned by the luxurious enjoyments of opulence, disregarded.

Gouty

Gouty persons themselves are the most convincing proofs that the gout is the consequence of high living. Are there not instances of persons who having by a turn of fortune been reduced to extreme necessity, found themselves freed from the attacks of the gout, at the very time, as it were, that they were deprived of their fortune?

The gouty epicureans imagine that they have a right to complain of the tortures they suffer, and take it ill if they are not pitied, pretending that having never been guilty of drinking to excess, but have even abridged themselves of pernicious liquors, their pains are not a proper subject of raillery. Have not they deserved the gout by their excesses in aliments abounding in mucilage? It is not enough to employ one's whole care in avoiding on one side the cause of a distemper which threatens us, if this cause may easily attack us from another. In avoiding one rock, we ought

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surely

surely to be equally careful not to strike against another.

Tho' the gout, as occasioned by the use of certain aliments only, be not epidemic in any place, yet it is much more frequent in large cities than in the country; and this phænomenon can be attributed only to the regimen of living, which is indeed very different. The usual regimen in cities is that I have just mentioned. The country, for the most part, contents itself with the food as furnished by nature; and uses vegetables more than any other species of aliment. It will, possibly, be objected, that these vegetables also contain a mucilage, seeing they are nourishing, and consequently, that they should occasion the gout. This is an effect which has never been imputed to them; but there is a very good reason for it. Besides that a less quantity of mucilage is naturally contained in vegetable than in animal substances; the mucilage peculiar to the former is expanded thro' a large quantity

of water, the true dissolvent of all kinds of mucilages, even that which occasions the gout ; seeing all gouty persons receive great relief by continuing to drink copiously of water, and may even entirely preserve themselves from it by a month's resolute perseverance in this custom; as is proved by the capuchin's remedy, which consists only in abstaining from all nourishment, except water, during that space.

Thus I hope I have sufficiently demonstrated the gouty humour to be mucilaginous ; that this mucilage is discernible in the humours and in the parts affected; also, that in the places where the gout is endemial, it owes its origin to the use of particular liquor, and that in other climates it is contracted only by certain liquid and solid aliments, containing a large quantity of mucilage. The gouty humour being mucilaginous, it must necessarily be inferred that the gout is the effect of a superabundant mucilage, which is also adventitious, since it

does not naturally exist in the human body.

C H A P. V.

Solid Aliments, and Liquors which contain but a small Quantity of Mucilage, are not of a gouty Tendency.

IF, in countries where the gout is endemial, the cause of it is generally to be attributed to the qualities of the common drink, containing a large quantity of mucilage, it naturally follows, that in countries where this distemper is little known, the common drink must be of a quality directly opposite; that is, must contain little or no mucilage. This proposition firmly supported, will serve to support what has been advanced in the preceding chapter.

It is not at all necessary here to take a survey of many distant countries, the provinces of Burgundy and Champagne being sufficient.

sufficient. They are a perfect contrast to Normandy and Flanders; in the latter, no person seems exempt from the gout, in the former, scarce any body ever feels it.

I have proved that in Flanders and Normandy this distemper is occasioned by the natural and common drink of these provinces: it now remains to shew, with equal clearness and perspicuity, that Burgundy and Champagne entirely owe their happy exemption from it to their natural liquor. This liquor all the world knows to be wine, nay good wine; and that in these two provinces grow the best wines of all France; the most proper for preserving and restoring health.

Is it asked why these wines are better than others? This is answered by the analyses of them. It is because these wines abound much more than others in salts, acids, and spirits, and contain less phlegm or water, and less mucilage. These

reasons should be the more convincing as the goodness of these wines is in proportion to the quantity of these principles they contain. This is so certain, that in favourable years these wines never fail to abound more in these three principles than in bad years; so that the taste alone is sufficient to judge, not only of the quality of the wine, but also of the quantity of principles it contains, and a nice palate is never in danger of being mistaken.

Let us now examine into the quality of a wine thus abounding in salts, acids, and spirits. What should be the result of this combination? The quality must doubtless consist in an absence of mucilage, since wherever salts abound the mucilage is entirely destroyed. The result is a saponaceous compound, soap itself being only a composition of oil and salt. But all saponaceous bodies have the power of dissolving mucilages; so that after such a dissolution they are not to be restored.

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The wines of Burgundy then being saponaceous, and saturated with salts, cannot contain any great quantity of mucilage. That this wine has all these properties is easily demonstrated; in its analysis it leaves little or no mucilage. Farther, instead of staining linen on which it is spilt, it even takes from it any fresh stains. This effect, which is solely peculiar to saponaceous liquors, evidently proves this wine to be greatly so.

In general all drinks and all aliments, which, in an equal volume, contain an equal quantity of salts, are found to be less mucilaginous than those which contain a smaller quantity of salts. Venison, for example, is less mucilaginous, and yields a greater quantity of salts, than meat usually sold in the market. The parsnip, the carrot, the turnip, contain more salt than the pear, the apple, and wheat; and these latter are also much more mucilaginous than the former. In fine, one

would be almost persuaded to think, that there is such a strong antipathy between salt and mucilage, as that they ought never to be expected together in any considerable quantity.

Thus the Burgundy wine does not produce the gout, because it contains very little mucilage; but may farther remove it, by its saponaceous quality. The few gouty persons in this province are happily sensible of the difference between this wine and that of other countries, being neither so cruelly, nor so frequently tormented as elsewhere; and if they sometimes happen to be violently attacked by the gout, it is entirely from their having been obliged to make use of bad wines, tart and harsh; and consequently, contains less salt and more mucilage, which is very different from a saponaceous quality.

Lastly, experience has shewn, that medicines abounding in salts are the best adapted

dapted to mitigate the tortures of the gout, as germander and ground-pine ; cryftals of tartar, tho' almoft a fimple acid, is alfo ufed with fuccefs ; old cheefe is likewise recommended as containing more falts than the new.

But here again I may be asked, that if Burgundy wine be fo far from being of a gouty quality, that it is a prefervative againft the gout, how is it that fome gouty perfons are found in this happy province ? The wine is here quite out of the queftion ; it is to fome other caufe that gouty perfons ought to attribute their diftemper.

Let them be asked whether they have not either been a long time abfent from this country, or whether they have conformed to the customary way of living in it ? There will fcarce be found one perfon, who cannot acknowledge one or the other to be his caufe. Why fhould it be thought ftrange that a Burgundian
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should contract this distemper by a bad regimen, when no body is surprized to see a Norman entirely free from it, by strictly confining himself to a good regimen; the principal part of which consists in denying himself the natural liquor of his province.

All that has been said of Burgundy is equally applicable to Champagne; there is little or no difference between these two provinces. The inhabitants generally drink a large quantity of good wine, and eat little. Great drinkers are, in general, very moderate eaters. Thus the inhabitants of these two provinces secure themselves from the gout two ways, by moderation with regard to solid aliments, and the frequent use of a liquor, the quality of which is repugnant to that of the gout, and tends entirely to extirpate it; provided only that the wine be used with discretion and moderation.

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In all countries where the common liquor is not of a quality to bring on the gout, this distemper must be imputed to the solid aliments; tho' its derivation must be placed to the account of the more nutritive and succulent, such as contain a great deal of mucilage; since those who do not frequently use them, are never subject to that distemper.

Whoever is desirous of preserving himself from the gout, or, if already subject to it, would prevent the fits, may easily do it in any country whatever, by constantly drinking water, or wine not mucilaginous; by eating the less nutritive kinds of aliments, like mountaineers, who live entirely on game; or like persons subsisting by hard labour, who eat great quantities of bread, cheese, and vegetables, and but very little meat. There must be a considerable affinity betwixt the aliments whose qualities are opposite to the gout, and the remedies which are most effectual in

in removing it. Experience proves, those remedies which are not mucilaginous, contain a great deal of salt, and approach nearest to a saponaceous state, to be the most effectual in relieving a gouty person. The aliments which most resemble these remedies, must partake of their virtues. If they are not so powerful in effectually destroying the gout, they should seem at least sufficient to preserve from it those it has yet spared.

It must now be perceived that it is very easy to account for, 1. Why the gout in certain countries invades almost all sorts of persons; whilst in another, it is hardly known. 2. Why in the countries where it is not endemic it seizes only persons living in affluence and luxury; whilst the poor, in the same countries, are totally exempt from it. 3. Thus it is seen to be the fruit of intemperance, and a certain wantonness in liquid and solid aliments, more common among the rich than the poor,
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and more frequently in the towns than in the country. Lastly, that it is derived from mucilaginous foods and liquors, since those of a different quality cannot contribute to its production.

C H A P. VI.

The Fits of the Gout are only the Efforts of Nature to ease herself by Depuration, of the too great Quantity of Mucilage contained in the Mass of Humours.

Succulent foods, and nutritive liquors must naturally impart to the blood the ill qualities resident in them. These have been proved to consist in a great abundance of mucilage, more dangerous in liquid than in solid aliments; because, these ill qualities not only abound more in certain liquors than in the aliments, but, also, people generally drink more than they eat. Besides, potables are much sooner digested than esculents,
and

and pass almost entire into the mass of humours.

From all these reasons it is, that the gout in provinces where the natural and common drink contains much mucilage, is endemial; and becomes epidemical in the countries where it is not so common, when, in certain years, the drinks are more replete with mucilage, than in those years when the fruits, from whence they are made, attain their proper maturity.

It is not to be questioned but the germ of the gout is an abounding mucilage in the blood; but it will never bring on the gout, unless the quantity of it be considerable. For in the hereditary gout, the continual existence of this germ cannot be denied, yet why does it not very often bring on the fits? It is because there is not a superabundance. It is the same in the acquired gout;

gout; a certain quantity of mucilage will suffice for cherishing the germ; but to produce fits, there must also be a superabundance, the several causes of which we shall examine in another place. In a superabundance of mucilage, from whatever cause it proceeds, nature exerts herself for discharging it; and these efforts must be proportioned to the quantity of the adventitious matter, and the obstruction caused by it.

I have already said that the efforts of nature in this case tended to procure a depuration, nearly the same as that observed in the plague, pestilential fevers, certain malignant fevers, and in all depuratory or eruptive fevers.

This depuration takes place only in distempers which owe their origin to a vitiation of the blood, and is no other than a deposition of the morbid matter in any part

part whatever, and generally to the great relief of the patient. This deposition is of a different nature, and manifests itself according to the character of the distemper by which it is produced. Thus in the plague and pestilential fevers, it appears in the form of bubo's and abscesses; in malignant fevers it shews itself in the parotid glands; lastly, in depuratory fevers it is always directed towards the skin, where it appears in the form of small pustules, as in the miliary fever, the measles, and the small pox. The more easily and speedily these different depositions are formed, the more relief the patients find from them; for all painful symptoms accompanying distempers abate as the deposition advances towards maturity.

In the gout the usual seats of depuration are the different articulations of the extremities; and generally those at the greatest distance from the heart. It is preceded by spontaneous lassitudes, spasms, and nau-

nauseas; but always more or less accompanied by a fever, proportioned to the quantity and quality of the mucilaginous humour, of which the deposition consists.

There is no depuration without a fever, it being the only way nature seems to be acquainted with, for freeing herself from what is foreign and noxious to her. The fever continues whilst the depuration is forming, but diminishes in proportion as the latter approaches to its period. It is for this reason that the species of gout called the *cold gout* is the least troublesome, the deposition being, as it were, formed at once; and the patient's tortures not by far so lasting as in the *hot*; where the symptoms are more violent, more dangerous, and more lasting, on account of the extreme slowness with which the deposition is formed.

There is, however, a very considerable difference between the deposition of

the gouty humour, and all others; and this is, that it takes up more time in forming itself. But this cannot be otherwise, the humour which occasions it being much grosser, consequently it must cost nature more time in making fit to be deposited.

It must further be observed, that the depositions always terminate in the part where they first made their appearance; if they happen to change their place, and a metastasis ensues, the original tumor disperses itself and disappears, in order to shew itself externally somewhere else; unless the metastasis has settled on one of the viscera, or some internal part. Whereas in the gout the deposition which hath appeared in one articulation, shews itself as long in another; nay even in several depositions, the first subsists.

The cause of this phænomenon is to be imputed to the quantity of the humour,
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which in every other distemper is less than in the gout; and to the seat of the deposition, which is smaller in the latter than in any of the former. Thus in a small quantity of the gouty humour, as in young persons, the depuration being perfectly completed by the least effort of nature, then in her vigour, the deposition must be effected at once; but in a considerable quantity of this morbid humour, the depuration can never be perfected during the first fit, for two reasons. First, because one single articulation is not capacious enough to receive all the matter requisite to be deposited. Secondly, because, in aged persons, the efforts of nature are too weak; and therefore in freeing herself from all incumbrances, she is obliged to effect it by degrees. Accordingly young persons have rarely more than a single fit, and that, as Hippocrates remarked, of no long continuance; but, according to the same author, aged persons have several, and these more lasting; for they do not often

escape by having only one or two articulations affected; almost all of them, where the gouty humour is in sufficient quantity, being liable to receive it.

By a fit, I mean an attack of the pain of the gout, felt for some days in one of the extremities, and, afterwards intermitting, shews itself again at some distance of time. This is the common definition of it, and is applicable to the gout either in young or aged persons; with this difference however, that the attack in young persons is simple, being confined to one articulation; but complex in aged persons, the gouty humour in them depositing itself in several articulations with little or no respite. From these different attacks succeeding one another, I venture to affirm, that aged persons have several fits; because, at every change, or, to speak more correctly, at every deposition of the gouty humour, all the symptoms return, and seem very nearly the same as
they

they were before the first attack, or, if you please, before the first fit.

In truth, the nausea, the lassitudes, and the fever all increase; and these symptoms abate only as a new deposition is made in a new articulation, to shew itself again in the same manner, if the gouty humour be sufficient to form a third deposition in another articulation. Thus I distinguish two kinds of fits; the simple, which is confined to one articulation; and the complex, in which the gouty humour attacks several. It is more or less complex according as the number of articulations, where a deposition has been received, is more or less.

It must not be imagined that in the complex fit, the gouty humour is translated from the part where it at first settled to invade another; since the original deposition continues to subsist. This phænomenon, as I have already observed, is owing en-

tirely to the too great abundance of the morbid matter, and because one articulation is not capacious enough to contain the whole quantity of the matter nature endeavours to free herself from. To be convinced of this, we need only attend to the manner in which the gout makes its appearance in its different fits.

In the first, for instance, it is generally felt only in the articulation of the great toe; at the second it seizes on the whole foot; at the third, the other foot is at once totally affected by it; at the fourth, or more, it invades the knees or hands. In fine, it seems to spread farther in proportion to the time of its continuance, so that often in the last fits, there is not a single articulation of the extremities but what has been affected; and most of the depositions subsist at the same time. Now this phenomenon, I repeat it, can only be accounted for, from the great abundance of gouty mucilage, or from the want of capacity

capacity in the parts where this humour deposits itself. I could subjoin a third cause, the effect of which is pretty evident in the irregular gout; I mean, the insufficiency of nature, or the weakness of the efforts she makes for her relief.

I return to my subject, and say, that the number of depositions is proportioned to the quantity of gouty humour contained in the vessels. Daily experience shews, that aged persons are most exposed to a multiplicity of them; but then all must allow that the quantity of the humour must be very considerable in such persons, nature being under a decay, the elasticity of the organs impaired; consequently the trituration and attenuation of the humours diminished. On the other hand, there must be an increase of the gouty humour, the perspiration in such persons not being so copious as in those of less advanced years. They also eat more than is necessary for repairing the daily waste of

their bodies. In fine, so much does the number of depositions depend on the quantity of humour, that if persons who have been accustomed to have several in their regular fits, should during the intermission bring on by their indiscretion a fresh fit before the usual time, the number of depositions in this fit will be much fewer, and often one only, in a person who would have thought himself kindly dealt with if he had laboured under five or six.

The deficiency or capacity in the articulations, has also a large share in multiplying the number of depositions. This defect may subsist in the synovial glands, and the vessels which humectate them. It is very seldom to be suspected in the first fit, these parts being usually free; but it may exist immediately afterwards; because the humour once deposited there, is too gross to have been entirely dissolved and acquire a sufficient fluidity to be resorbed by the vessels, and pass into the blood, in order
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to undergo, a second time, the laws of circulation.

Now this portion of inspissated humour settled in the vessels, must have diminished their capacity, and at every succeeding fit, its own volume must be augmented; consequently, the capacity must be diminished proportionally. The obstruction is sometimes so great as to produce nodes evident to the senses.

In this case, how can an articulation thus circumstanced, be proper for receiving a deposition, and even one that is an object of attention, as it generally forms a pretty large tumour? Thus there may be a multiplicity of depositions without any remarkable quantity of the humour. It is often sufficient, be this quantity ever so little, that it cannot be contained in one articulation; from whatever cause it proceeds. For this phænomenon may sometimes be owing to the insufficiency of the efforts

efforts of nature, whether natural or accidental. The natural is common to persons in years; the accidental to the younger, who, desirous of having their tortures mitigated, injudiciously make use of repellents, by which means the elasticity of the parts affected is too much increased. This insufficiency consists in nature's not impelling with equal force, the humour she desires to free herself from, and that her efforts are unequal to the obstructions and resistance she necessarily meets with in the extremities, where she is desirous, as it were, of fixing the whole deposition, that she finds herself obliged to direct her efforts another way, and deposit the humour in a part where the resistance can be more easily surmounted.

C H A P. VII.

Of the Manner in which the Depuration is made, and of the Formation of the subsequent Depositions.

WHEN the gouty humour is superabundant, either from itself or some other cause, it occasions a disorder in the body, its tenaciousness and viscosity clog the course of the fluids, and weaken the elasticity of the solids. The pulse also, is now faint and languid; but nature, impatient of the state which tends to her destruction, soon collects herself, the pulse beats with more strength and celerity, the whole body is in agitation, and labours without respite, till the humour has fixed itself in a part, where it is, as it were, fettered and chained down; for when it is once confined there, it is incapable of any farther action. This conflict of na-

ture is in all distempers known by the appellation of *fit*, especially in the gout.

Let us now examine this kind of combat; let us enquire into the springs which nature sets to work, and the means she employs to obtain the superiority. To do this with all possible clearness, I shall consider the fit at three different stages, that is, at its beginning, when the depuration is made; at the acme, or time of forming the deposition; and at its declension or period, which is necessarily followed by the dissipation of the matter deposited, or at least the greatest part of it. The first stage, or that of making the depuration, is generally indicated by spasms, lassitudes, nausea, indolence, and a languor in the pulse, and even throughout the whole machine; which the gouty persons are very desirous of surmounting, but cannot make the necessary attempts. This state is occasioned by the abundance of gouty humour,
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clogging the circulation of the blood; and by that means causing that torpor so unaccountable to the patient. The flux of the animal spirits, which is always proportioned to the celerity of the circulation of the blood, now becomes more slow and unequal, produces part of those symptoms, and brings on a heaviness, which, if continued, seems to threaten the destruction of the whole machine. Let us not accuse nature of shewing too much weakness in this juncture; this weakness is necessary for facilitating a depuration, which cannot be performed but in a state of repose.

The term depuration is very common in chemistry, and used to express the purification of mixt bodies, whether solid or fluid. The purification of solids consists only in disengaging the heterogeneous particles, either adherent to mixt bodies, or incorporated with their different parts, without entering into their composition;
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the usual method of which is, by throwing on them a large quantity of water. This water dilutes, washes, and carries away with it these particles, and this the more easily if they have been previously divided by friction, trituration, and attrition. The purification, or rather depuration of the fluids, the term generally used in this case, consists in the separation of heterogeneous particles, suspended in fluids, and composing, in appearance, but one mixed body, tho' not at all constituent parts of them. The depuration of fluids is performed in a very different manner from that of solids; the latter requires motion to facilitate the separation of the particles; whereas, on the contrary, in the former, rest is necessary to promote the reunion of the particles, which thus forming larger masses, will either precipitate to the bottom of the fluid, or float on its surface, according to their specific gravity. As the suspension of these particles in fluids is owing to their continual

tinual motion, the only method of making a depuration is, by putting these fluids in a state of rest; this is no more than a natural and daily observation; but art goes farther, and demonstrates, that the more motion is requisite to keep a heterogeneous body suspended in a fluid, the shorter time of rest will be sufficient for freeing itself from it. By the word rest I do not mean a perfect immobility, but a diminution, either more or less, in the common and natural motion of a fluid.

The mucilaginous matter, or gouty humour, is heterogeneous to the blood, but circulates, in a confused manner, with it in the vessels; where it continues mixt with it, while in so small a quantity that the circulatory motion of the blood keeps the several parts at such a distance and so dispersed, that they cannot easily approach each other, or form a congestion, which, by its magnitude, might retard the circulation.

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But whenever the gouty humour is increased to such a quantity as of itself to produce a slowness in the circulation, or if the motion of the blood is retarded by any other cause, tho' the gouty humour be not of itself, in so great a quantity, the depuration will begin; that is, the dispersed particles of the humour, which are, as it were, suspended in the mass of blood, will coalesce, and such a congestion will ensue, as will still increase the obstruction, and diminish the motion. During this retardation, the particles continually approximate nearer and nearer to one another, and consequently the congestions increase; whence the circulation will meet with still greater obstructions. So that if this gradation was carried to a certain degree, it would infallibly throw the animal œconomy into a disorder which might prove fatal; did not nature, ever watchful for her own preservation, exert herself for her relief; and by her powerful efforts surmount these growing dangers. This is
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what she performs in the second stage of the depuration, or during time of the precipitation of the masses.

We have observed, that in a perfect depuration, the heterogeneous particles suspended in a fluid, came into contact with each other, and formed masses, which either precipitated to the bottom, or swam on the surface, according to their specific gravity.

It must however be remembered, that generally such a depuration can take place in such fluids only, as have an intestine motion, and even in the blood, when entirely deprived of its circulatory motion; as may be seen in the basons after blood-letting, where the blood, having only an intestine motion, separates into two bodies, one fluid, called the *serum*, the other solid, properly called the blood. The latter consists of the red and the fibrous or lym-

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phatic parts, which appear to be fluid only when thoroughly mixed with the *serum* in the vessels, by means of the circulatory motion.

But if the blood requires a circulatory motion, in order to make its different parts continue fluid, much greater need has it of this motion, and in a more powerful degree, to keep divided and separated particles adventitious to it; and, consequently, on a remission of this motion, these heterogeneous particles, will run together, and the more easily, in proportion to the greater diminution in the circulation.

It is not sufficient to know the rationale of this coalescence of divided particles; it is also necessary to know in what part it happens. Now I judge that this coalescence more readily happens in a part which contains a greater quantity of congested matter: it will not, I believe, be disputed that

that the larger vessels generally contain the greater quantity of it; these vessels are therefore the seat of this coalescence.

This being admitted; I mean that the too great quantity of the gouty humour occasions a retardation of the motion of the blood, and that the reunion of the divided particles is effected in the larger vessels; let us now examine, what becomes of the masses formed by this reunion.

Nature, who in the first stage of depuration has been in a state of suffering, endeavours to gain the ascendant, and in this conflict, the gouty humour furnishes it with the most speedy and proper means. For as it is in the retardation of the circulatory motion that the greatest fear consists, by which the reunion of its parts, is promoted and, consequently, that the power it makes use of to irritate the parts thro' which it is obliged to pass; and these parts

being the heart and blood-vessels, the irritation of which is dangerous, they contract themselves with more force and activity than usual. This is the effect produced in them by every irritation. The heart and arteries rapidly impelling the blood, assist in carrying with it considerable masses. It is certain that fluids either in an open or closer canal, carry along heterogeneous bodies with more facility in a rapid motion, than when that motion is diminished.

This extraordinary motion of the blood forces the mucilaginous substances to the parts most remote from the heart, as the extremities, where the precipitation of the masses, brought with it into these parts, is performed. Let us here call to mind the state of a gouty person at this time.

1. He has a fever; therefore the motion of the blood is increased.
2. He feels pains in the extremities; these parts are then irritated. These pains are not the same

same in all gouty persons ; they sometimes vary in the same subject, so that the gouty matter does not always act alike.

The fever, as I have already observed, is in its beginning occasioned by an irritation ; but insensible because general ; the fever increases in proportion to the pain felt in the extremities. These pains are owing to the size of the masses distending the vessels destined to distribute the humours to these parts ; their diameters being often too small for these masses to pass along them without distending and rubbing against their coats which are extremely sensible. In fine, the pains vary in proportion to the magnitude, quantity, density, and velocity of these masses. If they are few, and strongly impelled, the pains, they occasion, are confined to the parts destined to the precipitation of the humour, and to no great extent. If they are more numerous, at some distance from one another, and their motion but slow, they occasion

numbnesses, darting pains and others less acute. But if these masses are considerable both in size, quantity, and celerity, their pains are more severe, and more extensive.

The pains are always proportioned to the distention of the vessels; when a great number are attacked, the cause is to be imputed to the great quantity of the gouty humour, or to the greater or lesser density of the masses. It is only in the small vessels, where the diameters are too minute, that these masses cause pains, and not in the larger which have ample diameters, and where consequently the attritions are not felt, there being little or no distention.

In the gout, rest is not required to facilitate the precipitation of the masses formed by the gouty humour; on the contrary, the motion of the blood must be accelerated in order the more readily to convey these masses into the extremities of those vessels,

vessels, which are their natural receptacles. The retardation of the motion of the blood being necessary for the conjunction of the particles, the increase of the motion of that fluid is not less necessary for the precipitation of the masses formed by that conjunction. This is what passes during the first stage of the fit, or in the time of depuration.

The second stage is that when tumours appear in the extremities, and are usually accompanied with heat and redness. They scarce bear the gentlest touch; but any stroke or collision causes excruciating torments. These tumors are produced by the masses which have been deposited in the extremities immediately after their precipitation, and even often at the same time. They are deposited there for two reasons. First, because these parts are more remote from the heart, which is the center of motion. Secondly, because of

the greater resistance in them, than in parts nearer that *viscus*.

In fluids, that move continually in confined vessels, the velocity must be less in parts more remote from the center of motion, than in all parts nearer it; these fluids having then met with more resistance and friction, must, consequently, have lost a great part of their motion. Thus they become incapable of supporting heterogeneous substances, which therefore subside.

The blood contained in the vessels of the extremities, is in a similar situation; but they must besides be naturally the seat of the gouty humour, because the particles of which this humour is composed are too large and gross to pass freely thro' the small diameters of the vessels of the extremities. The grosser parts of the humour thus necessarily settle in
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these vessels, which are stopt up, and thus new obstacles to circulation and the course of the humours are formed. The vessels thus stopt up by the presence of a dense humour become distended, and by that means press against the contiguous vessels, cause a fresh obstacle to the motion of the blood, and occasion stoppages which increase the tumors.

The mucilaginous substances, begin by depositing themselves in the synovial glands of the articulations, as they are destined to secrete a humour of the same nature, and necessary for lubricating the parts adapted to continual motion. And here we may admire the excellent œconomy of nature, in distributing the grossest molecule of the humours in those articulations which are most exposed to constant motion, the division and friction being there necessarily most forcible, and consequently the dissipation more easily performed.

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The fynovial glands thus choaked up by matter to be deposited must increase both in density and magnitude ; but this cannot be done without removing from each other the circumambient parts ; and this removal must naturally be attended with a distention in the fibres, where the nerves being very numerous, the pains must be extremely acute. On the other hand, the choaking up the glands impedes the circulation of the fluids in the most proximate vessels, which, in their turn, also become obstructed, and form those tumors which usually accompany the several depositions of gouty matter. These tumors are always proportionable to the number and extent of the vessels obstructed.

During this time the motion of the blood must be conceived to be accelerated ; consequently the fever to be heightened, and the pains to be more fixed, but always in proportion to the distension.

Lastly,

Lastly, the deposition being totally formed, and the tumor more considerable than it was before, the motion of the blood becomes less, the fever abates, and the pains daily decrease. This is the third stage of the fit.

The occasion of this stage is that nature has relieved herself from the superabundance, which she has fixed in the extremities; and because in the preceding stage, she has attenuated part of the masses of the humour, by accelerating the motion of the fluids, fitting them by this means for undergoing the laws of circulation. The tumor, tho' increased, becomes less sensible, the tension being less; all the patient complains of being a weakness in the part affected, which is no more than the consequence of the vellications it may have undergone.

In this stage it is that the humours disperse, even that of the gout, if not become

come too dense and solid. It goes off by perspiration if it be fluid and not viscous; or if too gross for passing thro' the pores, it is again absorbed into the blood. But if it be too gross for the circulation it remains in the place where deposited, forms nodes, or swellings, not to be dispersed but must remain during the existence of the body.

I shall briefly recapitulate what I have said. A fit of the gout is occasioned by the superabundance of a gouty humour. This superabundance may be either true and natural, or false and accidental. The true and natural is no other than an actual excess of the gouty humour. The false and accidental, a quantity of humour, which, without offending in quantity, cannot be suspended in the mass of blood.

The superabundance, whether true or false, distends the vessels beyond their elasticity. The vessels cannot be distended a
certain

certain time without bringing on a relaxation. This relaxation facilitates the reunion of the particles of the gouty humour; these concrete into masses, which both oppose the circulation and augment the relaxation. These masses become more and more considerable, till nature exerts her whole force to comminute and dislodge them, and procure her own relief. She throws them into the extremities of the vessels of the articulations, where she is obliged to leave them, for want of force to drive them farther; and to overcome the compound obstacles she now meets with in the viscosity of the humour and smallness of the vessels in which it is inclosed. This resistance obliges nature to redouble her efforts, and the effects are depositions that appear in large tumors; and afterwards a dissipation of the whole or at least the greater part of those tumors.

But I am told, if nature be able by her efforts to free herself from what is prejudicial

dicial to her after it has acquired such a heighth, and is then obliged to exert herself, why does she not do so at the beginning? I have already said that we should not reproach nature with any weakness, it being necessary towards a happy issue; for in a superabundance of this humour, should nature always keep it divided, this humour would mix with that of the secretions, vitiate them, and occasion the irregular gout. At the beginning of such a superabundance there must be an increase of the secretions, or there will be an end of the animal œconomy; and even sooner if the superabundance proceeds from a humour both heterogeneous and noxious to the other juices. Two good reasons excuse the seeming inactivity of nature when oppressed with the gouty humour. The first is the heterogeniety of this humour to that of transpiration, the urine, bile, and most other secretions. The second is its greater analogy and affinity with the humours secreted by the synovial glands, these being themselves mucilaginous. In

In the superabundance of any humour it must naturally be carried off by the augmentation of the secretion most analogous to it; and nature is to make use of the most favourable and easy method to perform it. Now the gouty humour has more analogy with the secretion of the synovial glands, than with any other. Nature therefore endeavours to free herself from the gouty humour by augmenting the secretion of these glands; and this augmentation can only take place by precipitating the gouty humour on the extremities; but there it will not rest if extremely attenuated. Nature must therefore facilitate the conjunction of the several particles of this humour, that by their magnitude they may be confined there the longer; for the more dense and large the humours are, the more time is necessary for the percolation of them.

C H A P. VIII.

The Mobility of the gouty Humour is a Depuration made at several Times.

THE ease and rapidity with which the gouty humour seems to shift its situation, and entirely quit a part in which it began to be felt, to take possession of another, give an appearance of an extraordinary power of mobility; in the explanation of which all authors who have attempted it have miscarried. The very cause to which this mobility of the humour has been attributed seems destructive of it. For it has always, and indeed justly, been thought that the acute and racking pains which accompany the gout were the effect of the fizziness and viscosity of the gouty humour; and this fixt character inseparable from viscosity, is hardly reconcileable with a mobility which has no parallel.

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The mobility may be distinguished into two kinds, the regular and irregular. The regular mobility is only when the gouty humour passes from one articulation to another, as from the foot to the knee; or from one extremity to another, as from the right foot to the left, or from the foot to hand or arm. This kind may vary with regard to the pains it occasions, but is never dangerous.

The irregular mobility has three variations. The first is when the gouty humour, leaving the articulations, transfers itself to some of the viscera; as when it flies from the foot to the lungs or stomach, in which case it is often fatal. The second variation is the reverse of the former, when the humour, after fixing itself on the viscera, removes from thence to the articulations of the extremities; and this is not without danger. The third, tho' something uncommon, is, when the gouty humour which had settled on one *vis-*

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cus, leaves it only to fix on another; and this is the most dangerous.

The mobility, whether regular or irregular, depends on the same causes as the multitude of the depositions; I mean the quantity of the gouty humour, which is too large to be contained in one, or even several articulations; as is evident from the reasons I have already alleged relating to the deposition. That the causes of the deposition are the same as those of the mobility is not at all strange, the latter being the cause of the former, and the multitude of the depositions no other than the result of the mobility of the gouty humour.

But before I proceed to give a detail of the causes of this mobility, it will not be amiss to premise what is commonly meant by the mobility of the gouty humour, and what is its natural meaning. By the definition given of it by all authors,

thors, and the idea of most modern physicians concerning it, they all seem to mean a sudden and facile translation of the gouty matter from one extremity to another, or from one part to another. They even think that this translation is perfect; that is, that the whole gouty humour, which had fixed itself on one part, totally quits it, at the time of the metastasis, in order to invade another. This opinion they found on the great diminution of pain in the part first affected, but which is felt in that part to which the gouty humour lately removed. But this way of reasoning however specious, is not satisfactory; it is moreover requisite that the deposition first formed should entirely disappear on the formation of a second; instead of which the contrary is always observed; and it is not uncommon to see three or four depositions in the same patient, at the same time.

Neither is this the proper idea of the mobility of the gouty humour; for how

can a part of the humour fixed in an articulation, and forming a deposition there, be conceived to have transferred itself from thence, when the signs of its presence in its first situation continue visible? What are the channels thro' which this humour could be conveyed? They must doubtless be the blood vessels, either arterial or venous. The arteries carry the blood from the heart to the extremities; the vein bring it back from the extremities to the heart. It will readily be granted that the translation cannot be made in the arteries; the return of the fluids being hindered by their own gravity, and the motion by which they are continually propelled. The veins then must be the canals thro' which this translation must be performed. But the dense and viscous humour deposited in the extremities of the arterial vessels, can never in so short a time reach the veins. That it remains a long time in the former is too evident from the deposition subsisting there. It
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is therefore a wrong conception that has been long entertained with regard to the mobility of this humour, not only because the part of the gouty humour, fixed in one articulation, is not totally removed into another, the first deposition still subsisting; but farther, this translation is impracticable, the dense and crude humour remains a long time in the part where it has deposited itself, and cannot, by any means, recover the passages of circulation in so short a time.

The true means of conceiving a just idea of the mobility of the gouty humour is to consider it as a copious depuration of the humour made at several times. It must always be remembered that all fits of the gout are attended with, and even occasioned by a depuration of the gouty humour, which nature endeavours to discharge. Now whenever this gouty humour, of which nature strives to ease herself, shall exceed the capacity of one articulation, the depuration

will be performed at several times; whether the abundance be real and effective, or the articulation too small for receiving all the humour which nature endeavours to discharge.

In order to be the more clearly understood, I shall make a supposition, in which I hope to be indulged as it is the only one I propose to make. I suppose then, that the quantity of gouty humour which nature is desirous of freeing herself from amounts to four ounces, and that an articulation can contain only one; what will become of the other three? Where are they to be placed? For nature will absolutely free herself from the whole quantity, and actually does so. The only satisfactory reasons with regard to this particular, are to be drawn from nature, whose manner of proceeding must be carefully attended to, on that stage of the fit, when the depuration is made. It must also be remembered that the depuration has
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two stages; the first is, that during which the particles of the gouty matter suspended in the blood, unite and form considerable masses: the second is the precipitation of these masses into the extremities, where the depositions should lodge, being hindered from passing through them, either by their density or magnitude. During the first stage, there is a general relaxation in the fibres, and a considerable diminution in the motion of the fluids. In the second the elasticity of the fibres is restored, and the motion of the fluids accelerated.

I now return to my Hypothesis. In the first stage of the depuration the quantity of humour to be precipitated will be four ounces; but in the second stage only one ounce is precipitated, that being sufficient to fill one articulation. No more will be precipitated, because the subsequent efforts of nature, will be so far from facilitating the precipitation, that they will totally

hinder it, seeing they all tend to comminute and disperse the masses. Farther, nature relieved by a deposition of one part of the peccant matter, is brought nearer to its natural state; but that can be sufficient only for a certain time. Nature by her vigorous conflicts in attenuating the masses becomes spent, this operation being a forced state, and therefore falls again into an inactive state. During this interval the parts of the gouty humour reunite a second time, and form new masses for precipitation. But where shall nature precipitate them? It cannot be in the articulation already full.—It must then be in another; this is the very thing which happens, and proceeds in the same manner as in the first fit. Nature relieved exerts a second time all her strength to dissolve the superabounding masses; she accomplishes her end, but the toilsome conflict, after a certain time, renders her again inactive. The conjunction of the particles of the humour immediately recommences;
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new particles are formed which nature, the two former articulations being already filled, will precipitate into a third. In fine, there will be a fourth fit, if the quantity of the gouty humour be sufficient for it.

The depuration may also be made at several returns, though the humour, which nature endeavours to ease herself of, be not in any considerable quantity, as for instance, only an ounce; if on the other hand, the articulation can contain only a quarter of an ounce. This is frequently the case with old persons, who have already endured a great number of fits.

One thing remarkable in both cases is, that every return is regular, both in the manner by which the fit is felt, and in the number of days betwixt the different fits. Each fit, or each return of the compounded fits, comes on nearly in the same manner as the first. In the first attack
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the pains are preceded by a relaxation. The pains are always increased after two or three hours sleep; because during that interval the relaxation having been greater, the humour becomes more formidable, by the conjunction of its different parts, which have coalesced into harder masses than before, and which nature cannot discharge, without very strong efforts; the consequences of which are very acute pains.

The process is the same in each fit; there is no new deposition, unless preceded by relaxation. It is always after a sleep of two or three hours, that the pains increase, and the deposition begins to form itself. It is not till eight or nine days after the commencement of the first, that the second takes place; and unless nature has been molested in her operation, there is the same interval between the second and the third, and the third and fourth. Every return or fit, being similar to the first, must be the effect of the same cause; there-

therefore such regular and natural effects are very erroneously attributed to a pretended mobility, which is directed by no law.

I may, perhaps, be asked, from whence the great diminution, and often, the cessation of the pains felt in the parts affected by the first fit, can proceed? Why these pains seem to transfer themselves to the part that is going to be affected? Why gouty persons are sensible of this translation? From observing with attention all that passes during the fit it will be very easy to give a satisfactory account of all these phænomena, they being no more than natural.

For, 1. every considerable abatement of pain is an effect of relaxation; as this is common in all other distempers, so it must also be in the gout. Farther, the diminution of the pains is always proportioned to the degree of relaxation;

laxation; so that a small increase of the latter, would be attended with an entire cessation of the former. 2. In a compound fit of the gout, the violence of the pain is only suspended, seeing the superabundance of humour, which first caused it, may, while it subsists, bring it on again. But tho' the violence of the pain be suspended during the interval of relaxation, it must soon return on another part; because in that which was first affected, nature must meet with more obstacles to surmount, and much fewer elsewhere.

These pains being occasioned only by the increased magnitude of the masses put in motion in the extremities of the vessels, these masses must have reached those parts to cause those pains. It is easy to conceive that a part already choaked up by a former deposition, is little adapted to receive these masses which are to form a second. Hence the second deposition must be made elsewhere, and be attended with
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new pains. I say new pains ; because those occasioned by the first deposition, continue as long as the deposition exists. There is indeed a diminution in the violence, but this violence diminishes only in proportion as the new deposition is formed. This phænomenon has been long ago observed even in other distempers ; it did not escape the attention of Hippocrates ; for he says, that whenever pains are felt in one part, those pains cease, if by accident any other part is seized with more acute ones ; and his opinion is, that in such a case, the spirits entirely abandon the first part, and retire to the second in order to increase the sensation of it. Will it be said, in this case, that the humour has quitted the first part, in order to fix on the second, tho' these two parts are affected from two different causes ? Doubtless, no ! Why then is it necessary to recur to a different method of acting in the gout ?

3. Gouty persons are sensible of this pretended translation, and this is natural. They feel with rapture the abatement of their pains during the relaxation; but during the precipitation of the masses, how severely do they pay for that short tranquillity? The pains indeed are become more supportable in the first part, but it is only to become more violent in another.

The question is, whether the pains diminish in one part, because the humour which occasioned them forsakes these parts to transfer itself to another; or, whether this diminution be owing to the lesser quantity of the humour pressing on this articulation, whilst it is carried in a much greater quantity to some other articulation.

I have already shewn the error of those who affirm that a part of the gouty humour, after being once deposited, can remove into another part. 1. Because the old deposition still subsists, together with

the new one ; therefore all the humour has not been removed. 2. In granting that this new deposition is formed by a portion of matter which had served for the former, the natural consequence should be, that the new deposition would be less considerable than the former, and the pains more supportable ; since the humour would be then less in quantity than before. But often the quite contrary is true ; and a third deposition is much larger than the two former.

This problem will be easily solved, if, as is reasonable, the diminution be attributed to the gouty humour, which, instead of precipitating itself in a part already affected, and into which it cannot now be received, deposits itself in another part unoccupied, where it may settle in greater quantity.

The irregular mobility is still a farther proof of what I have advanced ; for if the
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gouty humour, after seating itself in an articulation, fixes itself on one of the viscera, the articulation will not for that reason be freed from the humour, and the deposition previously made there, will remain a long time. If on the contrary, the first deposition of the humour was in one of the viscera, that part will also suffer a long time, notwithstanding the remaining part of the humour may have been drawn into an articulation. If, as it often happens, a part of the humour cannot be drawn to an extremity, it is owing to the completeness of the depuration, having entirely deposited itself in the viscus, and being once deposited and fixed there, it is impossible to remove it and relieve the affected viscus, unless this operation be remitted to length of time, as when it is fixed and confined in an articulation.

May I, in my turn, ask those who contend for this pretended mobility of the gouty humour, why this humour, which is of itself, according to them, so brisk,
active,

active, and ready, is also so heavy, so slow, and so fixed, when its mobility is quickened by all the aids of art? Batching and blood-letting are very often made use of, with little or no success, for weakening and emptying the extremities, and thus preparing for this humour a less dangerous seat; but these remedies can have no effect except the humour be circulating in the vessels. Therefore, as, in the present case, it no longer circulates in the vessels, it is no wonder we are often disappointed in our expectations.

It is only that part of the humour mixed with the blood in the large vessels, that can be determined towards any part, by either art or nature. For both in the regular and irregular gout, if the depuration has made one complete deposition, a second will never be procured. In the same manner the part of the humour already precipitated and fixed, cannot occasion a new deposition; so that the

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multitude of depositions must absolutely arise from the great abundance of the gouty humour, which requires the depuration to be performed at several times.

C H A P. IX.

There is but one Kind of Gout.

THE gout is commonly distinguished into three kinds: the cold, which is attended but with little heat, redness or pain. It is supposed to owe its origin to an inspissation of the lymphatic part of the blood, the tumor being considerable. The hot, which is ascribed to the acrimony of that lymph, the tumor being sometimes so small as to be scarce perceivable, but the part affected exceeding hot, painful, and more or less red, in proportion to the degree of the phlogosis or inflammation. The third kind participates of both the former; it is imputed to both the inspissation and acrimony of the lymph;

lymph; the tumor being very considerable, no less painful, and extremely inflamed.

Pituitous constitutions are most subject to the cold gout: the arid and bilious to the hot: and, the sanguine to the third. The opinion of these differences is thought to be much strengthened by the quality of the topical remedies made use of to procure relief, or mitigate the pains usually felt in this distemper. For if ever the supposed maxim, or rather the received opinion of treating a patient with remedies of an opposite quality to that of the cause and nature of his distemper seems to be well founded, it is certainly in the gout; since topical remedies, applied whilst cold, abate the tortures of the hot gout; and, on the contrary, in the cold gout, no relief is to be expected but from hot medicines, and applied hot to the part affected.

Probable and specious as these reasons appear, they are not sufficient to prove any variety in the gout, as to essential differences, or particular kinds, originated from different causes. To this purpose the gout should vary, not only in the same subject, but even in a compound fit. Besides, the topical remedies, whether of a hot or cold quality, by the combination of their principles, or by that of their integral parts, should not all produce the same effect, when they have been heated by the fire, or cooled by ice.

In effect, how can so swift a succession of the acrimony of the lymph to its inspissation be brought about, so that there no longer remains any vestige of the first cause as soon as the second begins to act? How can it be conceived that this second cause shall disperse to make room for the first; and this often without any other remedy than diet, which has, in general,
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been the same from the first stage of a compound fit to its period?

What then can be the cause of this variation, of this momentaneous change? No explanation of this phænomenon, that I have ever met with, appears satisfactory; and I am persuaded that no such can be given, from the present opinion of admitting several causes of this distemper.

But if only one cause of the gout be admitted, especially that which, in my own opinion, I have shewn and demonstrated, these various phænomena will be so far from perplexing that it will be very easy to give a clear explanation of them.

Let it be here remembered, 1. That the cause of the gout is an abundance of mucilage, heterogeneous to the mass of humours. 2. That this mucilage is the product of certain liquors, and some kinds

of solid aliments. 3. That by mucilage is meant a mixt body compounded of very little oil, much earth, and a great quantity of water and air; and, consequently, is viscid and glutinous.

Now this mucilage, like all other mucilaginous bodies, may vary in the proportion of its principles. There is a difference between gum arabic and gum tragacanth, and the latter again differs from other gums, as is evident from their analyses. But this difference consists only in the different proportions of their principles. The quantity of earth will always be much larger than that of oil, and the air and water always considerably exceed the earth. This alone is sufficient to give to each gum, besides the quality that it has in common with others, a particular property; and, consequently, enable it to produce different effects. The comparison must be admitted, gums being the product of a
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mucilage mixt with the fluids which circulate in plants, as the gouty humour among the human species.

If there be a variation in the quantity of the principles which compose the mucilages of plants, why may there not be the same variety with regard to the quantity of principles in the gouty humour? If, in proportion to this variety, the mucilages do not always produce the same effects, why may not the different phænomena of the gout, be the consequence of different principles in the gouty humour?

The gout must not only be different in different persons, as gums differ according to the plant from which they are taken, but may also differ in the same person, as gums, on the same tree, are known to differ. And the cold and hot gout may be found in the same subject, as the same tree

exudes a gum thoroughly deficcated and solid, and another gum of a more loose texture, and even liquid.

I shall therefore attribute to the various principles of the gouty humour, all the diversity of phænomena which it causes. I shall confine myself to account for the three kinds of gout above mentioned, tho' the variety may be almost extended to infinity; but this succinct detail, well supported, will enable any physician to explain all the variety observed in the gout, they being all reducible to those three.

Tho' the gouty humour be always the same, it may vary in the quantity of its principles; and to this it is owing that the gout is sensible either of heat or cold alone, or of both at the same time. These are the principal symptoms by which it is to be characterised. For the heat, redness,

ness, and pain, are, like the swelling, occasioned only as the superabundance of the gouty humour is more or less.

The gout sensible of heat, or, when its pains are increased by the application of warm topics to the parts affected, is occasioned by a gross thick humour, containing a small quantity of water in a pretty large volume of gouty humour. This kind is most common in persons of a dry and bilious habit; and it is no wonder that the gouty humour in such constitutions should be extremely gross, as all the humours in general are so in persons of such habits. Its sensibility to heat is owing to the great rarefaction of the humour, as being gross and thick, all mucilages undergoing an extreme rarefaction on being exposed to the fire; nor can its volume be enlarged by rarefaction without vellicating and distending the fibres of the parts where it is lodged. The pains increase in proportion to the distension,

tion, and the distention itself depends on the grossness of the humour and the degree of heat communicated to it.

Boerhaave has demonstrated the principal characteristic quality of fire and heat to be that power inherent in them, of augmenting every way the volume of all bodies, even the most compact. Every one may experience that of all bodies, none give a more palpable instance of this than mucilages. The least fire, the least heat, causes an expansion in them; and what can be the cause of this rarefaction but the expansion of the air contained and inclosed in all bodies, the elasticity of which is increased by heat.

The pains felt in a fit of the gout being occasioned by the distention of the parts where the gouty humour is settled, must increase in proportion as the distention increases. In the present case, the distention is promoted by nothing more than by
heat;

heat ; therefore, on the application of topics either actually or potentially hot, to the parts affected, an exacerbation of the pains must ensue.

On the contrary, the application of topics either actually or potentially cold will cause an abatement in the pains ; because, instead of augmenting the volume of the gouty humour, they compress and diminish it every way. The distention relaxes, as the humour is reduced to a less volume. Cold diminishes the volume of bodies, without taking any thing from them, as generally as heat augments it without making any addition.

The gout, affected by cold, or where the pains are increased by the application of cooling topics, is that where the swelling is considerable, but the heat little and the pains moderate. It is frequently seen in pituitous and moist constitutions, where the fibres being in general

ral soft, and flexible, are less susceptible of irritation than dry and tense fibres.

Here heat and cold do not act as in the preceding case, neither should they; because, in the former case, the gouty humour is so gross as to be nearly solid; but, in the present case, it is almost entirely fluid, containing, in a small compass, a great quantity of water. Now it is known that air inclosed in this fluid, has some difficulty in recovering its elasticity, even when acted on by a violent fire, its rarefaction being slow. Heat, therefore, cannot increase the pains, as it does not augment the distention. On the contrary, it rather divides the watery particles, and thus renders their passage more easy through the pores of the skin, now relaxed and dilated by this heat. So that, in this case, heat, so far from augmenting the distention, is even necessary for abating it: but cold must necessarily augment the distention, and, consequently, the pains; because

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cause it constringes the pores of the skin, condenses the fluid settled in the part affected, hinders it from passing off by perspiration, and thus brings on a continual increase of the load, whereby the exacerbations caused by the distention of the fibres become more severe.

In fine, the gout is sensible of cold and heat at the same time, and the pains will increase on the application of topics either hot or cold, if the gouty humour though gross contains a very considerable quantity of water, which is not uncommon in sanguine constitutions. This phenomenon depends on the heat acting violently on the dense matter, expanding and rarefying it, as in the first case. It also proceeds from the obstruction given to the superabounding water by the cold, as in the second case. Thus the gouty humour is, as it were, multiplied by both the heat and the cold; the effect of which is the
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distention of the fibres, and, consequently, an increase of the pains.

The variety of phænomena, apparent in the gout, of which we have already taken notice, being a consequence of the variety in the proportion of the principles of the gouty humour, all other differences may be referred to the same cause; for they ever depend either on the density of the humour, or on the abundance of water contained in it, or on both. But these combinations being infinite; the varieties will also be infinite.

To give a satisfactory explanation of the cause of the variations of the gout, not only in the same subject, but also in one fit only, of the compound kind, ought not to be looked upon as a matter of real difficulty. Besides what the regimen of the patient may contribute to this change, the gouty humour may also vary. A deposition

position of gross matter may be formed, and immediately after another of a more fluid or thin substance.

The manner in which the depuration is performed, has also a great share in it; for where the relaxation has been great and lasting, the masses formed by the humour will be very dense; and in a speedy depuration, they will be light, fluid, and thin. To prove that the depuration may be unequal in the compound fit would be superfluous, it being a matter within every one's observation: but if the depuration be unequal, it necessarily follows, that the result of this depuration must be also unequal, that the deposition must not be alike; that is, they will be more or less compact, and always partake of the present quality of the humour by which they are produced; consequently, they must be sometimes sensible to heat, sometimes sensible to cold; and, in fine, sometimes sensible to cold and heat at the same time; unless

unless the gouty humour hath arrived at a state of insensibility, when either heat or cold produce no such phænomena, as in the nodes formed by the deposition.

These nodes are not susceptible of heat and cold, the gouty humour contained in them having undergone such a change in its principles as to be totally deprived of its water, from whence it derives its flexibility and tendency to fluidity, and is become extremely gross. Its compactness is such that for cold or heat to make any sensible impression on it, both must act with greater power and violence; and in order to this, the degrees of heat and cold must be augmented, I mean recourse must be had to actual fire, and ice.

There are two kinds of nodes; for the gouty matter, either still retains some mucilage, and resembles those gums extremely desiccated, or is so far exhausted of its water, that nothing remains but a white earth,

earth, more or less friable, and more or less resembling in some measure mortar or gypsum. This difference arises from the variety in the principles. There is a great deal more earth, and less water than usual, the volume continuing the same.

This alteration is occasioned by the long continuance of the matter in the part affected, and by the heat of the part itself; which, in time contribute to deprive the gouty humour of its aqueous particles, leaving only those that consist of earth, which are always too gross either for passing off by perspiration, or re-entering the mass of humours in order to undergo again the laws of circulation.

Lastly, The gouty humour, after being long seated on the part where it was deposited, is found to have undergone a change like that of gum, exposed to the action of a slow and gentle fire, by which

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means it gradually loses its aqueous and oily particles, so that what remains of it is only a white friable earth, perfectly resembling that taken from the nodes of gouty persons. But it must be observed that gums are with greater difficulty brought to this state when liquid, than when extremely deficcated.

Since by admitting a mucilaginous quality in the gout, all its various phenomena may be accounted for, I cannot imagine that this mucilage will be denied; especially as I think I have demonstrated, that it is the produce of certain liquors and aliments; that it is perceivable before the fit, during its continuance, and a long time after it.

I have observed, that to bring on the fits of the gout, it is not sufficient that the humours be impregnated with mucilaginous particles, but that these particles must also be superabundant so as to make
nature,

nature sollicitous for her own safety, in order to free herself from the load.

Many are the causes that may contribute to this superabundance, and some of them seem even opposite to each other; so that I shall now endeavour to specify them, and explain their modes of acting.

CHAP. X.

The Superabundance of mucilaginous Substances is the only Cause of the Fits of the Gout.

THOUGH the gouty humour may abound, and be heterogeneous to the mass of juices, it will never produce fits, unless it superabounds in a very copious manner. This is evident both in the hereditary and the acquired gout. It is well known that this humour when once increased to a certain degree, has been seldom or never wholly overcome by all the efforts of nature. Thus there always remains in the

mass of juices a greater or less quantity of gouty humour, which does not always declare its existence either by regular or irregular fits.

This humour, therefore, continues some time inactive, the intervals between each fit, being often at a considerable distance from each other. It is objected, that at each fit the gouty humour is entirely destroyed, and that immediately after a sufficient quantity of other humour is reproduced for bringing on a fresh attack?

Besides that this is not the common opinion, the presence of the deposition, long perceivable after the fits, answers the objection; and, what is still more, the entire destruction of one humour, and the speedy production of fits, so closely following each other, are irreconcilable. Is not this attributing effects to a cause which cannot exist?

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On the other hand, if it be said, that the mere presence of the gouty humour is sufficient to cause the fits, the changes in the fits cannot be accounted for with any plausibility. For this humour must be always the same, and, consequently, act in the same manner; but the gout varies in the same subject, the fits being sometimes long, sometimes short. The gout, is sometimes sensible to heat, sometimes sensible to cold, and sometimes sensible to both.

From whence then can proceed these differences, except the cause of the fits is not the same with that of the distemper? The superabundance of mucilaginous substances is, indeed, the basis of the gout; but it is to an extreme superabundance of it that the fits are owing. It is with the gouty humour as with all other vitiated fluids, which do not seem to molest nature, except they are in considerable quantities. But when once they are increased to a certain quantity, they then seem to

corrupt the whole mass of juices, and, either by their depravity or excess, prompt nature to free herself from them, which she does by different methods; but by the most proper, and at the same time the most easy, with regard to each different humour.

I have shewn at large the manner how the superabundance of mucilaginous substances may bring on fits of the gout; so that I shall, in the sequel, only consider the causes which tend to promote this superabundance; and as those are numerous, I shall arrange them in classes.

Before I enter upon this immense detail, that I may do it in a methodical manner, I shall begin with distinguishing two kinds of superabundance, the real and the false; after which I shall shew the causes of both, and, with the greatest perspicuity I am able, display the mechanism by which they act.

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By real superabundance, I mean, a very considerable quantity of mucilaginous humour accumulated in the vessels, the molecule of which can no longer remain suspended in the mass of juices. This superabundance, extends the vessels, and causes a considerable diminution in the motion of the fluids.

The false superabundance is caused by a too great relaxation in the solids, and, at the same time, by a too great abatement in the motion of the fluids, whereby they become less capable of supporting a small quantity of adventitious matter, such as the gouty humour.

Some causes are productive of a real superabundance only, whilst others can produce nothing but a false superabundance. There are also others which, at the same time contribute to both. They are to be sought for in what physicians call the non-naturals, or things which may

hurt or preserve health according to the free or forced use of them.

These the ancients reckoned fix, air, aliments, motion and rest, watching and sleep, the secretions and excretions, and the passions of the soul.

The immoderate employment of these either in quality or quantity, may determine the fits, and accelerate or prolong them; but not unless the juices be previously filled with mucilaginous substances, which of themselves alone are sufficient to produce the gout.

. Let us now examine how these different causes may act.

CHAP. XI.

Enquiry into the Causes of the real Superabundance of the gouty Humour.

THE superabundance of the gouty humour is real, or true, when by its presence alone, nature is compelled to free herself from it; which can never be the case, but when the quantity of this humour is such as that it cannot be longer suspended in the mass of juices, nor circulate freely with them.

This real superabundance may be either natural or accidental. It is natural when existing solely by itself; when it is the only superabounding humour. It is accidental when some other humour superabounds at the same time with the gouty, which forces it to act sooner than it would naturally, not being yet in a quantity sufficient to force nature to free herself from it.

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There is but one single cause of the natural and real superabundance, and that is purely the product of aliments; but the solid and liquid aliments made use of must contain a large quantity of mucilage. Without this quality, as I have already shewn, they have no tendency to cause the gout. All aliments of a different quality never bring on the gout, but other different diseases according to their qualities.

After what has been said I cannot think it will be necessary to prove, that mucilaginous liquors and foods easily cause a superabundance of the gouty humour, when plentifully used, as they are impregnated with the very germ of the gout. It is only necessary here to shew how it may be judged whether the access of the gout be solely the effect of this cause.

The first fits of the gout may rationally be attributed to this cause when the strength
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of nature has not been considerably impaired, and she still enjoys most of her powers, which she never abandons but on compulsion. But, in the present case, it is only by a true and natural superabundance, that nature can suffer, being yet able successfully to oppose the other obstacles, to which, on other occasions, she is obliged to submit.

By this kind of superabundance the fits are also occasioned when simple, when succeeding each other at a considerable space of time, when the intervals are nearly equal, and there is at least two or three years between one and the other.

The superabundance cannot happen in a small space of time; it is very slow in its formation, nature yet having strength sufficient for destroying every moment, some parts of it. Accordingly this simplicity takes place in the first years only of the gout.

With a gouty person, who has already passed thro' four or five fits, this simplicity is past. Nature debilitated by long struggles will not permit him to flatter himself for the future with those long intervals of an ease, so much desired but so little sought; few or none putting themselves to any trouble to obtain them.

Then it is that the real and natural superabundance, commonly gives place to a real but at the same time an accidental superabundance. Nature now exhausted, and, consequently, of less strength than before, is become more sensible to the different impressions which tend to disorder her, and sinks the sooner under them. The distemperature of the air will contribute to form a superabundance in the humours in general. A diminution in the secretions, a diminution in the evacuations, as that of the hæmorrhoidal flux, may also tend greatly to promote it. But the most general causes of this superabundance, and of the

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the hasty fits of the gout, are sloth, indolence, and inactivity of a life imagined to be happy, because it may be spent in idleness. In this case, the fits of the gout are not only brought on more hastily, but they are also more lasting, being more compounded, and approximating nearer to one another. These are the consequences of that supposed felicity. The least change in the air we are obliged to breathe, and which entirely surrounds us, sensibly affects us. The least diminution in our secretions becomes an object of fear, as being constantly attended with sharp and frequent pains, and but little intermissions of ease.

An unusual coldness or heat in the air, a diminution in the dissipation in some of our juices, rest, tranquility, (and without offence be it said, that long sleeps, now become so customary) I insist all these things concur to form and produce a superabundance in the juices in general. These are facts which it is presumed I shall easily be dispensed

penfed with from proving at large. They are what all writers are agreed in; and even the commonalty allow floth to be the fource of the fuperabundance of peccant humours.

I fhall only explain how the fuperabundance of the humours in general may occafion fits of the gout, tho' the gouty humour be not fufficiently copious, and not fufficient of itfelf to produce a fit.

The abundance of humours caufes, what phyficians call a plethora, or plenitude of the veffels, occafioned by the abundance of humours diftending them beyond their natural dimenfions. This diftention is fucceeded by a relaxation beyond that to which nature is fubject when the human machine ftill enjoys that tranquility and equilibrium neceffary for the free and eafy exercife of all its functions.

The natural confequence of fuch a relaxation is, a diminution more or lefs confiderable

siderable in the motion of the fluids. Thus there are two causes which combine to approximate and bring together the mucilaginous particles, namely, an impotency in the fibres for agitating, triturating and dividing the gouty humour. 2. an insufficiency in the motion of the fluids to keep it suspended and dispersed:

Thus the particles of this humour must coalesce in order to be precipitated when increased to such masses as occasion pains proportionate to their density and motion.

This kind of superabundance is very frequently observed in persons of an indolent disposition, and in those of a sedentary calling. In persons who have undergone a great number of fits, and in those advanced in years, nothing contributes more to procure this superabundance than the deficiency of perspiration, and the weakness of the fibres;

bres; to both which, these several sorts of persons are generally subject.

C H A P. XII.

Enquiry into the Causes of the false Superabundance.

I have said, and I here repeat it, that the false superabundance of the gouty humour, is that which depends entirely on the too great relaxation in the fibres; this relaxation being always attended with such a diminution in the motion of the fluids, that the gouty humour can no longer remain suspended in them.

The most common cause of this relaxation is, immoderate exercise, which it frequently succeeds. Indiscreet watchings produce the same effect. Among the passions of the soul, excessive anger and joy. To these may be added the intemperate drinking of
wine

wine and spirituous liquors. All these causes begin by extending the fibres beyond their natural elasticity, and the fibres being thus kept extended for a considerable time, must necessarily afterwards be relaxed in proportion to the degree of tensility by which it was preceded.

What must happen during this relaxation may be easily conjectured, the gouty humour, tho' but in a very small quantity may coalesce, the *moleculæ* may re-unite and form new masses, which by their magnitude must retard the circulation of the blood, and by that means bring on a fit of the gout.

The gouty humour does not undergo this process when the fits are occasioned by profuse excretions, or by copious evacuations, as that of the hæmorrhoidal flux, profuse sweats, dejection and melancholy. In all these cases the relaxation comes on slowly, and the fit is not felt till this relaxation has

acquired such a state, that the gouty humour contained in the vessels, tho' its quantity be very small, can no longer continue suspended and divided in the blood; but the *moleculæ* of this humour begin to coalesce into masses, which are to be precipitated, the deposition of which are the necessary consequence.

Every thing seems to favour the conjecture that the fit is caused by this kind of superabundance, whenever only one or two depositions are perceived in a person, whose former fits were always attended with four or five. The probability will be still greater if the fits did not return at the usual time, but were rather anticipated; that is, that a person who used to have the gout every year, and such a fit as I have described happening before the usual time, it may justly be attributed to this superabundance. It will be proper also by questioning the patient, to endeavour to make a discovery, which, of all those

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mentioned in this chapter, is the true cause of this superabundance.

C H A P. XIII.

Enquiry into the Causes which contribute to these two Kinds of Superabundance.

THE most general and frequent cause is the premature or immoderate use of the venery. It may be said to be the only cause which can bring on at the same time the two kinds of superabundance.

This passion must, however, by no means be thought of itself productive of the gout, according to the mistaken notions of the ancient physicians, who advanced this proposition from the observations they had made during a long practice, that the generality of their gouty patients had very frequently visited the Cytherean island, and been very lavish in

offering, to the goddess Venus, the most balsamic parts of the juices contained in the human body.

Without enlarging upon this head, I shall only observe that the cause of the gout is the same in all men; that if it is found in the debauched, our disquisitions must rest there, without perplexing ourselves to find any other cause of it than mucilage.

Persons who have been most addicted to the pleasures of love, must be the most subject to the gout, and actually are so. But what has an air of singularity is, that the debauchees contract the gout from the same reason, and by the very same means as a person who has constantly lived in celibacy acquires it.

In effect, does celibacy hinder the bachelor from using plentifully succulent aliments and nutritive liquors? Doubtless

no.

no. But generally a person after an excess in the pleasures of love is obliged to have recourse to such a regimen for recruiting the powers of nature; and even to multiply the use of these kinds of aliments in order to recruit the exhausted spirits.

Thus it is not absolutely from their intemperance in the pleasures of love, that these persons are subject to the gout; but because this vice obliges them to have recourse to the same false regimen as all other gouty persons, namely, the use of aliments and liquors which abound in mucilage; and farther they generally indulge themselves in a greater excess of them than others.

Now if this alone is sufficient to bring the gout on persons who lead single lives, it must also have the same effect on a debauchee; debaucheries in love being known to be ge-

nerally succeeded by debaucheries of the table.

This is not all, to contract the gout in this manner is to deserve it doubly; for by this deliberate bringing on one's self a real superabundance of gouty humour, the false superabundance is also promoted. The secretion of the semen, if in any wise forced, is often the cause of it, and more frequently still the forced state, into which the whole machine has been thrown during the venereal act: for we are always sufferers by forcing it to continue in this state by violence. The fibres fatigued by a distention too long continued, fall into a very great relaxation, and want force necessary to impell the fluids contained in the vessels. These fluids circulating with less velocity, become less proper for conveying and comminuting heterogeneous substances. Hence proceed a multitude of conflicts for nature, and
which

which she owes only to her weakness. Thus excess in the pleasures of love exposes us the more to the attacks of the gout, not only with regard to the regimen, inordinately used for repairing the exhausted strength; but likewise with regard to the weakness of the fibres, the sure consequence of such violent efforts, and always followed by too great and habitual relaxation.

C H A P. XIV.

The Fits of the Gout more frequent in Spring and Autumn than in the other Seasons.

NOtwithstanding we have said the fits of the gout are occasioned by a superabundance either true or false, which superabundance may exist every moment of life, since fits of the gout are daily seen even in different subjects; yet Spring and Autumn seem to contribute much more to the frequency of this distemper than Win-

ter and Summer; for if four fits of the gout be observed in these latter seasons, one is certainly seen in the former.

The original cause of the gouty humour is not the work of a day; it is gradually, and by little and little that the superabundance forms itself; but the effect of this superabundance, or in other words, the fits of the gout, may be determined in twenty four hours. The superabundance is most promoted during the Winter and Summer, but its effects are more easily determined in Spring and Autumn.

Winter is the social season, when we imagine nothing should be done, and therefore little or nothing is done. We give ourselves up to the pleasures of the table, play, and sleep; eat largely, and use little exercise; the transpiration is less than in any other season; we keep ourselves continually in warm apartments, another obstruction to a due perspiration, which is
always

always freer in the open air, tho' cold, than in a warm air inclosed *. From this kind of life, which is continued for some time, results a superabundance in the juices; but not felt, being formed insensibly, and our machine accustomed to it; but the superabundance will manifest its effects in the Spring. The air, now become warm, will, in its turn, influence our bodies, occasion a more rapid motion in our fluids, and a brisker action in our solids. The combination of these two causes will distend the vessels, beyond their proper tone, give rise to different vernal distempers, and determine one only in one subject. This distemper, whatever it be, will depend on the quality, quantity, and seat of the superabounding humour; so

* This fact is ascertained by the observations of Dr. Guettard on Plants, inserted in the Memoirs of the Royal Academy of Sciences 1748. Likewise by observations like those of Sanctorius, made by M. Marteau a physician, but which have not as yet appeared in public.

that

that a person whose humours are overcharged with mucilaginous particles will have a fit of the gout. On the contrary, if the primæ viæ be filled with peccant humours, a fever, diarrhœa, a dysentery, &c. may be expected.

During Summer we eat little, but make up the deficiency by drinking largely; all the secretions are diminished except transpiration which is then copious, and little more exercise is used than in Winter: all this contributes to the inspissation of the several juices. The Autumn colds come on, and now transpiration is either stopped or diminished, so that the portion of humour allotted for it must of necessity remain a long time in the vessels, 'till it has discovered other ways for its discharge. The vessels will then be distended beyond their tone; this will be succeeded by a proportionate relaxation, the *moleculæ* of gouty humour, already less separated, will further

ther reunite, and form masses so considerable, that nature will be under a necessity of precipitating them.

It may be said in general, that cold and heat coming on suddenly before our bodies are enured to them, are the most frequent determining causes of the fits of the gout. Tho' they do not act in the same manner, yet they produce the same effect in the superabundance of the humours; that is, they exalt it to such a degree, that it can no longer subsist without offending nature, and consequently force her to free herself from it in the most speedy manner, which can only be done, in a subject where the gouty humour abounds, by bringing on a new fit of the gout.

C H A P. XV.

General Plan of Cure.

IN treating a distemper, the surest, easiest and speediest method is to apply our utmost attention to understand the character of the distemper; and discover the causes that produce it. The first cause being once known nothing more is requisite, because by destroying that, the distemper it has occasioned will be dispersed.

But it is not always possible, when this cause is well known, to destroy it; either because it has too long existed, and by that means affected the machine too strongly, to admit of any hopes of an entire restoration; or the subject in whom the cause exists by a forwardness of temper will not, or by some other defect independant of himself, cannot undergo the proper treatment. In this case the secondary, or determining

termining causes must be enquired into ; more especially that which is most conducive to determine the distemper in this or that subject ; it is then to be attacked with more vigour and advantage, as there can be no danger, or room for fear.

It is taken for granted, that the gouty humour is of a mucilaginous character ; a character which is the effect of a plentiful use of liquors and aliments containing a great deal of mucilage. This matter giving no indications of its presence, and declaring itself only by tortures, which is always the case when its quantity superabounds, it follows that there are two different methods of procuring relief and treating this distemper with success ; either by totally destroying its efficient cause, the very mucilaginous particles, or by removing the secondary causes, which determine the fits.

The

The destruction of the mucilage will be easily compassed by a proper regimen, opposite to that which has produced the distemper. Nothing is more easy, it being the product of substances heterogeneous to the mass of our juices; I mean of aliments and liquors, the use of which is not absolutely necessary to the preservation of life, or even to health, but such as may be easily abstained from. A cure might speedily be affected where there is a sincere inclination to be cured; especially if in the first appearances of the gout, the patients would resolutely confine themselves to foods and liquors of very little nourishment, and, which, consequently, contain very little mucilage.

But gouty persons no sooner imagine the fit to be over, than they forget the tortures of it, and are immediately for making themselves amends for the long time they have been debarred from their favourite way

way of living. They are impatient till they renew their epicurean practices ; dishes must be prepared for them to revive that appetite which the distemper had taken away ; they will be obeyed, and which, to their misfortune, they are too readily. Accustomed to enjoy the pleasures of life with all possible freedom and facility, and being able to gratify all their caprices, they refuse to listen to those salutary advices by which their constitutions might be improved and their health confirmed. On the least respite they imagine themselves in a condition of partaking in all the freedoms and engagements permitted to one in a confirmed state of health.

The result of this stubbornness is, that the respite is soon over, and the gouty person is sometimes seized with fits more violent than they have yet known. But there are some who are scarce got free from this fit, before they return to their former course of life. Sobriety or even any regularity

gularity of regimen they dread ; and, therefore, no cure can be expected ; nor should the physicians attempt it. Not that I blame their condescension to such patients, who reproach physicians with their being unable to cure the gout ; and the physicians seem in some measure to acquiesce in it, the sooner to free themselves from such patients, who are the constant scourges of medicine, and the torture of the physician.

But if there are any who are really desirous of being cured, and who will themselves contribute towards their cure, their endeavours will not be in vain. Let them only abridge themselves of one meal a day, especially supper ; content themselves with a good dinner, which must, however, consist only of foods containing very little nourishment in a considerable volume, and make use of the saponaceous medicines I shall mention in the third part of this work.

By

By such a conduct the superabundance of the gouty humour will be prevented, and at the same time destroyed. This is not indeed the work of a moment; but which is not to be abandoned as it will relieve us from a distemper, which, when regular, is attended by such terrible torments, and, when irregular, so dangerous and fatal.

This treatment however will not alone be sufficient to conquer the hereditary, nor even the acquired gout, if inveterate; the destruction, if possible, of the mucilage or germ of the gout contained in the mass of humours, must, at the same time be attempted, or, at least, endeavours must be used for diminishing its superabundance. But this end can only be obtained by removing the causes of this superabundance, and I venture to say, that if hitherto physicians have cured some gouty persons, for there is hardly one, who during the course of a long practice, but

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must

must have enjoyed the satisfaction of curing some, it is principally by this method.

The manner of treatment must necessarily admit of great variations; the accidental causes of the superabundancy being so greatly increased, that some are very different from others; and it often happens, that what has procured relief to one person, has augmented the pains and aggravated the distemper in another.

Thus it is no wonder to me, that Galen by bleeding cured gouty persons in whom a plethora was the cause of the superabundance of the gouty humour: that he recovered others by purging, the superabundance in these being owing to peccant humours. Others have cured the gout by gentle sudorifics; but in most of these cases, the superabundance was occasioned by a defect of perspiration. Success may also attend the use of diuretics, chalybeates, and aperitives; in case of a sup-
pressed

pressed evacuation and the general inspissation of the fluids.

Lastly, in case of a too great relaxation of the fibres, or excessive evacuations, cordials, wine, chalybeates, and astringents may be happily administered.

If it be possible to treat properly all gouty persons by endeavouring to remove the true cause of the superabundance of the gouty humour, it is, also, very dangerous to attempt the cure without being acquainted with this cause. For this reason, possibly, it has always been thought less dangerous to leave this distemper entirely to its self than to attempt its extirpation; because it has often happened, that a person cured of the gout by some remedy prescribed by a physician, has communicated and recommended the same to other gouty persons, who, so far from deriving any relief from it, have found themselves much worse. This dis-

temper can be treated only by a physician ; a physician alone being capable of investigating and examining the causes so necessary to be known ; and the only one who can properly distinguish them.

PART III.

Of the Treatment of the Gout.

CHAP I.

Of the Treatment of the Gout in general.

HAVING shewn the first cause of the gout to be a superabundance of mucilage, heterogeneous to the mass of humours; that this mucilage was formed by a plentiful use of liquid and solid aliments abounding with mucilaginous particles; that the only indications of its presence were the fits; that it never coalesces but when the superabundance of it is such that it could no longer remain suspended nor dispersed in the blood; and that nature was therefore under a necessity of freeing herself from it, which can be performed only at the

end of a certain time; I am thence of opinion that the gout is to be defined a periodical disorder of the articulations, attended with fevers more or less violent, with pains, and heat more or less in the part affected, all which terminate in a deposition, or tumor of different sizes, which never suppurates.

This definition does not, however, agree with all kinds of gout; but it is usual always to consider this distemper as regular; the deviations when irregular are to be abstractedly considered. These are the principal differences, the most evident, and the most essential objects of attention in the method of cure laid down by all authors.

The regular gout, properly so called, is that which attacks the articulations of the extremities only. When it declares itself in the articulations of the trunk, as those of the ribs, and the clavicles, it is termed irregular, and is more so

when it feizes any of the viscera or the noble parts. Both may be acquired, or hereditary; recent or inveterate.

The acquired, and, at the same time, regular gout, is generally less painful than the hereditary; and the recent less so than the inveterate. The irregular gout is always more tormenting than the regular, and the danger greater or less, as the parts attacked are more or less necessary to life. The recent may sometimes be accounted more dangerous than the inveterate; but this is not a fixed or invariable law: there is in these cases much of variety, which will be specified, when we come to speak particularly of this irregular gout; for both kinds require very different treatment. Not only the primary and determinate causes, but also the different seats of the distemper are to be considered. We shall begin with considering the regular gout as the easiest to cure; agreeable to the received maxim of beginning in sciences by ex-

hibiting what is most easy and best known, in order to a gradual knowledge of what is more difficult and less known.

C H A P. II.

Of the regular Gout.

THE regular gout is that which seizes only the articulations of the extremities. Tho' the ancients have distinguished three kinds of it, namely, the podagra, the chiragra, and the sciatica, these all differ only in the seat of the distemper; but they have not prescribed a particular treatment for each, and I shall, in this particular, follow their example, and consider the gout, whilst the seat of it is confined to the extremities, as the same distemper and of the same kind.

Causes of the Gout.

Besides the primordial source of the gout, which consists in a superabundance of mucilage,

cilage, and which is shewn in the second part to be indeed the only cause; the respective fits may be deduced from another origin, which is the same superabundance when so much increased that it can no longer remain in the vessels; nor continue suspended and dispersed in the mass of humours; whether this superabundance be true and real, or false and accidental.

With regard to the causes of that superabundance that is itself the determining cause of the fits, it has already been largely considered and, were it necessary to enter into a more circumstantial detail, a complete treatise of physic would be necessary, and in it I could say nothing new; my opinion being entirely founded on the mechanism of the human body, as now known; and of which no physician can be supposed ignorant. I shall therefore be the more brief, as what has been already said is abundantly sufficient

ficient to explain my meaning to practitioners, to whom this part is appropriated.

Symptoms.

There are symptoms that precede the fits of the gout, and others that attend them. These symptoms are spasmodic pains frequently felt during sleep, some days before the fit comes on; heaviness, inquietude, spontaneous lassitude, weariness after the most gentle exercise, or the least labour, and, at times, an impossibility of performing either; lancinating and transitory pains are felt in the articulations which the gout has already seized; an universal uneasiness, and an insurmountable indolence, or rather an absolute unwillingness to exercise. Sleep is less sound than usual, sometimes with frequent interruptions, and at others an insuperable propensity to sleep. The cause of all these phænomena is an inequality in the circulation of the blood,
and

and the motion of the animal spirits, occasioned by the superabundance of the gouty humour, already too gross for a free and equable passage thro' the circulatory vessels: added to these, the fibres lose a part of their elasticity, and the motion of the fluids is retarded; but both soon recover their former state, and vary successively till the commencement of the fit. When a conjunction of several of these phænomena happens, especially of the cramp, lassitude, the want of or excess of appetite, a fit may soon be expected.

The symptoms which accompany a fit, at least during the first two or three days after its commencement, are a fever, or at least a more than usual commotion in the fluids; a full, hard, extended pulse, such as is common in patients labouring under great pain. The pulsations are quicker than in the natural state, attended with an universal nausea. The shooting
pains

pains are more lasting. and succeed each other quicker than before. These pains always increase after two or three hours sleep or rather slumbering; restlessness being too common during at least the first three or four days of the fit; and the fifth day is the soonest that any thing like a sound sleep can be expected. During this time the deposition begins to shew itself, sometimes the very first day; in which case the pains are considerably less acute during the fit, than if the formation of the deposition had been delayed three or four days from its first appearance.

The deposition is always attended with heat and redness, more or less according to the quantity and density of the gouty humour, or the pressure and succession of the *moleculæ*, as the distention of the vessels will be always in proportion to the quantity and quality of the gouty humour.

After

After this, the deposition having caused a considerable tumor which generally continues increasing till the end of the fit, the acuteness and frequency of the pains abate, and the humour in the part affected being rendered more fluid, perspiration is more free; the fever abates; the pulse becomes less full, less hard and less extended than during the first days; and both the nausea and restlessness become less; in fine, all the symptoms daily diminish, but the patient does not dare to move the part affected; he is terrified at any persons coming near him, lest friction, cold or heat may again bring on his pains.

Of all these symptoms there is still a farther abatement at the end of nine days, all that remains is a great sensibility in the extremity affected; the patient dares not yet to use it, but endeavours to stir the part, tho' not without fear; he cannot support himself on it, as the weight of the
body

body pressing on the synovial glands, which are not yet entirely freed, extends them beyond what they can at present bear. In the mean time the appetite returns, and the pulse reassumes its natural state. This is what passes during the first fits, when simple; but in a patient who has already had several, and who is subject to compound fits, the tumor, instead of a total dissolution, often becomes indurated, and forms nodes, which may be of two kinds. The first is produced by an inspissated humour resembling mucilage, or gum almost dry, which, consequently cannot return into the circulation of the blood till it has acquired a greater degree of fluidity; and this cannot be done till after a certain time, which depends upon the degree of inspissation. The second kind is the result of a gross desiccated humour, totally incapable of rejoining the circulation, having utterly lost its fluidity, and become calcareous, talcous, or resembling small grains
of

of sand, which can only be got rid of by external applications.

These nodes are seldom seen in the beginning of this distemper. They generally indicate a superabundance of a very gross humour, and a want of elasticity in the fibres of the patient. The desiccation may be attributed to the heat of the human body. It does indeed contribute to it; but would never alone be able to produce it; unless it were, for the greatest part, promoted by the nature of the humour, or the abundance and combination of its principles.

DIAGNOSTIC.

The diagnostic of this distemper turns on three principal points. The first is to understand the distemper; the second the differences; and the third, the causes determining the fits.

To

To perceive the gout in a person who has previously had four or five fits, is very easy. There is hardly a possibility of erring, seeing the patient himself is not deceived : the difficulty is to know it at its first attacks, it being generally thought that to have it, one must have deserved it ; and that nobody can have deserved it without blushing. In consequence of this false modesty the gout is rather imputed to the wringing of a shoe, to a hurt unnoticed, or to some sprain ; and it is not till after several fits, that the mistake is cleared up and acknowledged. But the physician, even at the first fit, finds no difficulty in distinguishing the distemper ; a view of the part affected satisfies him immediately that it is the gout, as he perceives round the articulation both an inflammation and a tumor, but what he lays the greatest stress on is, the mucilaginous transudation all round the part affected ; a viscous, fizy, pellucid transudation, which is peculiar to this distemper.

Farther,

Moreover, in the want of transpiration, by asking the patient he will know whether it was not till after two or three hours sleep, that he began to feel the pain; whether during the following days it increased at the same time, and under the same circumstances. In this state of things there is no farther danger of mistake, the patient's distemper is unquestionably the gout.

The diagnostics of the several kinds is not more abstruse. If the tumor be considerable, with a copious transpiration, and the matter transpired instead of being viscous be tenuous, fluid, and wets the bandages; if the pain increases on the part affected by motion in bed, or on being exposed to the external air; it is then a gout sensible to cold, which proceeds from a fluid humour, and which contains a great deal of water in a small volume.

If, on the contrary, the tumor be not so considerable, and the matter transpired

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tenacious,

tenacious, glutinous, and viscid, the affected part extremely tender, but feeling some relief either on shifting its place in bed, or exposing it to the air; it is a gout sensible of heat, flowing from a very gross humour, which, in a considerable volume contains little water.

Lastly, a gout sensible of both cold and heat at the same time, is known, by the largeness of the tumor, tho' the transpiration be glutinous and viscid; and when it is attended with pains in the articulations, and the sharpness of these increase by the application of topics either actually or potentially hot, or actually or potentially cold: the pains will also be increased either by heating or cooling the parts.

These three kinds are to be carefully attended to, as they, in a great measure regulate the method of cure, and are all three to be treated in a different manner.

The

The diagnostic of the determining causes of the fits, is far from being so easy, as it not only depends, in some measure at least, on the confession of the patients, who do not always declare every thing necessary to be known; but there is also sometimes a complication of causes.

These determining causes are all those by which a superabundance of the gouty humour may be occasioned. It must, if possible, be known from the patient, or those about him, whether he eats and drinks plentifully, and what are his usual foods and liquors; whether he uses exercise, sleeps much, indulges himself frequently in venery; whether any one of the natural evacuations be either suppressed or augmented. These are almost all the causes of superabundance.

But as it is very seldom patients can be prevailed upon to make such confessions, I shall endeavour to instruct the physician

to proceed without them, and to discover from his own observations, all the causes, and even of distinguishing that which may have brought on the present fit.

Fits attacking a patient of a good constitution, at a considerable distance, indicate their being entirely occasioned by the superabundance of the gouty humour. The pulse is full, extended and hard; the fit, long before its being felt, has been preceded by a nausea, an universal uneasiness, a sound and longer sleep than usual, an aversion to all exercise, and even an inaptitude to any kind of work, spasms in the extremities, and even sharp, tho' short pains in the articulations.

If the fit has a little anticipated its usual time, it must be looked upon as proceeding partly from a general superabundance of humours. Now the causes of this superabundance must be known; these may be either suppressed evacuations, too much
indo-

indolence, or an habitual sleeping too long. With regard to these it behoves the patient to inform his physician. There are however some signs which may induce a physician to entertain some suspicions of the real cause; for here tho' the pulse be full, strong, and extended, it is not so in the same degree as in the former case. The nausea did not come on long before the fit, or few spasmodic or other pains felt in the articulations, but the tongue is discoloured.

In a simple fit of the gout, when only one, or, at most, two depositions are formed in a person, who usually has more; and he be, at the same time, free from spasms, nauseas, a depraved appetite, or lassitude, it must be attributed to a gust of passion, or to an excessive or unseasonably drinking wine or spirituous liquors, or perhaps to exercise too violent and too long continued. These causes usually bring on a fit the next day, or the day after at

farthest. But here the pulse, tho' hard is far from being so full, and extended.

If the fit happens during the recovery from a distemper, or presently after, the patient may be suspected of having eaten beyond his strength, and of being too hasty in recruiting the loss occasioned by his illness, as at such a juncture his perspiration cannot be very copious, being generally confined in his apartments, sedentary, and without any exercise.

But if the fit happens immediately after a distemper in which great evacuations were necessary, and that the physician had no other method of conquering the disease than by reducing his patient very low, this fit is doubtless caused by a too great relaxation, as that succeeding a too great tho' natural evacuation, is in young persons the effect of an excess in venery, and in aged a want of elasticity in the fibres. At such a time the strength languishes, the
pulse

pulse becomes faint, and often unequal; but nothing of the gout would be suspected had not the patient for a long time been subject to it, the only foundation for such suspicion being dull pains in the articulations, and an inability of moving them, or at least not without pain. Of this state the cause is a slow precipitation of the gouty molecularæ. A physician attending to all these causes when with his patient, and carefully observing the least concomitant circumstance of the fit he is to treat, will not be at a loss to perceive the different determining causes of the fits, and be able to apply an adequate remedy to them, without having recourse to the dangerous practices of such as undertake to treat this distemper without understanding any thing of its nature. Persons of this kind cannot be too severely exposed; but the careful physician establishes his reputation, and at the same time relieves the patient.

P R O G N O S T I C.

The prognostic is generally attended with little trouble. In this kind of gout there is no danger. Whilst it is regular the patient may be easy; but the next time it may become irregular, and then it is greatly to be feared, and often dangerous. The prognostic however varies according to the kind. When hereditary the cure is attended with great difficulty, especially when become inveterate, the mass of humour being too fully impregnated with mucilaginous matter, or the elasticity of the fibres too much impaired.

The acquired gout in a single fit is very easily suppressed in its beginning; and tho' the fit be compounded the success is certain, if it has yet formed only two or three depositions; but the difficulty increases with the number of the depositions. It is also necessary to know whether the gout made
its

its first attacks in an advanced age; and likewise to distinguish whether the fit be caused by a want of elasticity in the fibres, as the cure will then be rendered impracticable; but if it proceeds only from an intermission of customary exercises, it may be attempted.

Farther it is not a matter of indifference to know whether these depositions, formed during the fit, which the physician has attended, are sensible to heat or cold, a fit in which the tumors are sensible of cold being much easier treated than those tumors that are sensible of heat. The pains are more tolerable; the watchings less tedious, the nausea less general, and for these reasons, the vital parts less affected.

If it be not only from a superabundance of gouty humour, but also from that of the humours in general, that the fit proceeds, a paroxysm of a very compound nature may be expected. Simple

fits

fits are always more desirable than compound, the body not being so long in pain and the recovery much more speedy in the former than in the latter. A more favourable prognostic is always to be formed from one or two depositions, than from a greater number.

The prognostic likewise is not to be pronounced dangerous when the fit is caused by the suppression of some evacuation, immoderate exercise, a sudden gust of passion, or an unseasonable drinking of wine or spirituous liquors; for this fit will soon be over, and is generally very simple; the return of the evacuation will speedily relieve the patient, and the other cases generally take up but a very short space of time.

In fine, the prognostic should be more or less favourable in proportion to the distemper, its original cause, the quality and quantity of the determining causes of
the

the fits; for if, as is often the case in aged persons, a fit offers, which has been occasioned by a want of elasticity in the fibres, a defect in the motion of the fluids, and, farther, by a superabundance of humours, a case not extraordinary, the physician is left to himself, having little or no assistance to expect from nature. A speedy relief in this case is so little to be expected, that the patient should think himself very happy if the regular gout can be prevented from becoming irregular.

A regular physician, however, after carefully observing the symptoms attending the fits, and their causes, will readily draw as sure and certain a prognostic, as that declared by a son of Ignorance must be uncertain and equivocal.

Method of Cure.

The method of cure in this distemper is of two kinds, that of the particular

paroxysm, and that of the source of the distemper.

Fits being wholly occasioned by a superabundance of the gouty humour, and the physician consulted only during a fit, it will be more methodical to begin with the method of curing the fit for which he has been sent for ; than to explain the manner of going to the root of the distemper, which, as I have already shewn, owes its origin entirely to an abundance of mucilaginous matter, adventitious and heterogeneous to the mass of humours, and solely produced by solid and liquid aliments abounding with mucilage : tho' it be very certain the first cause being totally removed, the second, which brings on the fits, ceases of course.

The treatment of the fits must vary according to their different causes. Some have already been shewn to depend on the superabundance of the gouty humour abstractedly ;

tractedly; others from the superabundance of this humour jointly with that part of the humours in general; while others can be imputed only to a false superabundance. Of these different fits it is proposed to treat separately.

Method of curing a Fit occasioned by a real Superabundance of gouty humour.

The method of cure relative to a fit caused by a real superabundance, and actual plenitude of the vessels, proceeding only from the gouty humour, must be begun with bleeding. This is evident at first sight; nothing being better adapted to empty the vessels than bleeding, nothing easier or sooner performed. Let it, however, be remembered, that this evacuation has seldom been properly practised, and can, indeed, only be so in the first fits of the gout, when the attacks are not greatly compounded, except in women, and particularly those who have long enured themselves

selves to this evacuation : there being several (and even some men do the like,) who by this precaution render their fits of the gout less compounded than they were before. But the latter must remain in the vigour of life, that nature may still have strength sufficient to bear such a remedy without being disturbed in her operations.

Bleeding frequently proves an efficacious remedy alone in the first attack of the gout, as Galen several times experienced; for nature still enjoying all her faculties, and no time left to this distemper to weaken them, she struggles against the causes which bring on the gout, and sometimes totally subdues them.

How often the operation of bleeding must be repeated I shall not determine; because that must depend upon the habit of the patient. The plenitude and circum-

cumstances of the fit; besides the degree of the fever, the continual watchings, and the acuteness of the pains, are to regulate the physician's proceedings in such cases. It is true that very often on account of the relaxation, the infallible consequence of bleeding, a new deposition is made in the part where the operation was performed. But this should be no discouragement; for besides that this subsequent deposition is neither so considerable, or dangerous, or the pains attending it so acute, it is very seldom succeeded by a third deposition; because the venesection having diminished the quantity of the juices in general, has also, at the same time, lessened the superabundance of the gouty humour, which is the only cause of the fits. The multitude of depositions being a consequence of the superabundance, and always proportioned to it, by whatever means this superabundance is diminished, the number of depositions must also be necessarily diminished.

Nay

Nay farther, in the present case bleeding not only diminishes the quantity of the gouty humour, but it also greatly contributes to increase the elasticity of the vessels, which being thus emptied necessarily become more relaxed, and hence are better adapted for triturating, comminuting and dividing all the humours, and consequently rendering them more easily permeable to their different strainers. Thus the urine will be plentifully discharged, the perspiration more copious, the bile more easily separated; and so of the other secretions.

With regard to the place where the operation of bleeding should be performed, it is customary to follow the order of revulsion, that is, when the gout is in the foot to bleed in the arm, and always to bleed in the part most opposite that affected. I do not know that experience has shewn any danger in acting in a different manner; on the contrary, I look upon it much better to bleed always in the
found

sound foot, and even in that affected, if it is able to bear it; for the deposition being always a consequence of bleeding, it is most proper to be done in the part farthest distant from the heart, as that is always the least dangerous. Besides, in the articulations of the feet there is always larger capacities for receiving the gouty humour than in those of the hands; whence a larger deposition may be expected, and the number of depositions may be diminished.

This remedy must not however be thought to be the only one necessary during the fit; it is indeed what is highly proper to be done at the beginning of the paroxysm, in order to abate the acuteness of the pains, and procure some relief; but this does not always prove sufficient: the watchings are sometimes so fatiguing as to be productive of distempers more fatal than the gout itself.

As this watching must be imputed to the violence of the vellications and distensions in the fibres, which being little accustomed to such attacks, are the more sensible of them; recourse must be had to diluents, which at the same time may carry off some part of the gouty humour. Simple, or at most emollient clysters must be used; let the patient's drink be a small ptisan, like that made with ground-pine, germander and maidenhair, edulcorated to the taste of the patient with a little sugar. For food I would recommend light broths, without veal or fowl; but jellies or sweetmeats must be prohibited.

If the stomach should be incommoded by such a diet, let the patient be indulged with some good Canary or the best of Burgundy or Champaign, of which he may at different times take three or four small glasses a day, with a toast in them. By proceeding in this manner, two great points are obtained; the gouty humour is diluted

diluted or rendered more fluid, and the vessels acquire the necessary elasticity for precipitating, dividing, and comminuting it.

Necessary as opiates sometimes are for asswaging the pains and preventing the consequences, I would advise great caution in the administration of them; the respite they procure being rather a remission from, than any diminution of the pains; seeing they return, after the effects of these medicines, with redoubled exacerbations; for now the *moleculæ* of the gouty humour have had time to come into contact, and concrete into masses whose magnitudes cause a greater distention in the fibres. It is no surprise to me that Sydenham, who laboured under the gout above thirty years, complains of this distemper as giving him very little respite, and of the extreme length of his fits, since besides the great use of opiates in easing his pain, he lived entirely upon juleps made of farinaceous plants. Thus

he not only interrupted nature in her operations by the use of his anodyne drops; but he also fomented the germ of the gout, and increased the gouty humour by his regimen, which was constantly introducing into the mass of humours those mucilaginous particles which are the essence of the distemper.

It is very surprising that Sydenham, that accurate observer, who is considered as the modern Hippocrates, should not have treated chronical distempers with the same success as the acute: perhaps he thought it needless to enquire into the immediate causes of the latter, seeing they subsist no longer than the disorder: but, on the contrary, chronical distempers owe their duration to that of their causes, which are continually feeding them, and, consequently, are not to be attacked with success, whilst their causes remain unknown; and being unknown, cannot be removed.

It

It was Sydenham's personal interest to discover this cause, especially in the gout; and if he neglected applying himself to it, I can impute it only to some remains of the antient prejudices he had contracted with regard to this distemper; a failing common to all the physicians of his time.

This motive I think may be alledged with the greater reason, since that author could so easily comfort himself under his lasting tortures of the gout, imagining that thereby he was classed with kings, princes, ministers, literati, and other illustrious persons, who had been most subject to this distemper, and to whom no relief could ever be procured; which, from the method of treatment then pursued, I readily believe.

There are, however, cases where opiates are necessary and advantageous; but they are not so frequent as may be imagined, especially at Paris. It is only when the a-

bove mentioned remedies have failed of giving relief that they are to be called in ; and the choice of them is not a matter of indifference. Those are always to be preferred, which will assuage the pain without too much weakning the elasticity of the vessels ; a virtue to be found only in the theriaca, and even here a great difference is to be made between the old and the new, the latter will agree only with young persons and of a strong constitution, and whose fibres are tense and rigid ; but to aged persons it can never be proper, it partaking too much of the nature of opium, which may occasion too great a relaxation in old people. To these and to persons of a phlegmatic habit, who, in consequence of their habit, are most subject to the gout, their fibres being soft and lax, let the old theriaca be administered.

After the first days of the fit, when the fever is almost entirely ceased, the pains diminished, and sleep returned, something
more

more is to be done, the depravation of the digestive juices always accompanies the fits, subsists a long time after, and if the patient continues inactive, greatly retards his recovery. The surest method for removing this depravation is by discharging the depraved humours by means of purgatives. For besides the evacuation of the morbid humours contained in the first passages, they at the same time clear the body of a great part of the humours of which the gouty tumors are composed.

I prefer gentle purgatives to the stronger, as these occasion too much labour to the stomach and intestines, are apt to weaken them, and thus render them both more sensible to the impressions of the gouty humour, fitter for receiving its deposition, and further, more subject to the translated gout; which a prudent physician should always avoid.

The use of gentle purges I allow, sometimes renews the pains of the gout, from the relaxation which they may have occasioned; but these relapses are little to be apprehended as being always regular, which is more than can be promised when stronger purgatives are used. Wherefore it is my opinion that these gentle purges should be administered to gouty persons at several times; this being necessary to insure success, rather than prescribe strong purgatives, which being once taken may have such effects as not to be easily removed, especially if the gouty humour be so gross, that the deposition it has already formed be sensible of heat. In order then to remove the depravation of the digestive juices, and accelerate the recovery, let the patient take a potion composed of two ounces, or two ounces and a half, of manna dissolved in a glass of the infusion of germander or ground-pine, and after straining it, add an ounce of compound

pound fyrup of apples; this laxitive to be repeated two or three days, with an interval of a day or two, notwithstanding the first may have caused a fresh deposition.

But if the gout be sensible of cold, two drams of fenna, and the same quantity of some mild salt, as that of *Seignette*, should be added.

There yet remains another thing of great consequence with regard to hastening the recovery, namely, the restoration of the different secretions, which may have undergone some alteration or diminution during the fit; and which, when the care is left wholly to nature are not very soon re-established. The principal, and that which claims the greatest attention, is insensible perspiration; it being both the most copious, and often the most susceptible of injury by the least indisposition. It is restored by cordial dilutives, and diaphoretics, as three or four drams of *Squinant* *, boiled in three pounds

* The *Juncus odoratus*, or Camel's Hay.

of common water to two pounds. Of this a large glass is to be taken in a morning in bed, another an hour before dinner; this decoction may be drank with wine instead of common water: the third glass is to be taken six hours after dinner. Such is the method of cure I would recommend in fits of the gout, where the depositions are sensible of cold; but in that, where the depositions are sensible at the same time both of cold and heat, previously to the use of diaphoretics, the gouty humour must be diluted to a degree of fluidity by diluents, in order to evacuate it the more easily every way. For this purpose ptisans, or rather a slight infusion of plants containing a saponaceous salt, as germander and ground-pine, must be given for a fortnight, having been preceded by purgatives necessary for restoring the digestion.

In the gout sensible only of heat, more precaution is necessary, as diaphoretics,
tho'

tho' light, would thicken the humour, and increase its density ; because they diminish the aqueous parts of all humours, and the gouty humour is dense only from a deficiency of these aqueous parts, which must therefore be added ; and, indeed, too much of it cannot be furnished. Let these patients therefore drink plentifully of water for a month, and then return to the use of diaphoretics. Not that this is necessary to cure the fit, nature alone generally performing this acceptable office ; but in order to prevent the cure of the gout becoming more difficult, and the frequency and increase of the fits.

The gouty humour being totally dispersed and evacuated by the efforts of nature, and the assistance of art, which we have hitherto made to consist in the use of bleedings, diluents, purgatives, and diaphoretics ; endeavours are to be used, some time after the period of the fit, for preventing at least the other fits, and securing

curing the patient from them : for these fits will certainly return from a too great indulgence of inactivity, rest, or a too great presumption, that there remains no more danger. Then is the time for compassing this end so passionately desired by the patient.

This part of the cure being common to the different kinds of gout, and the treatment to be used for preventing all kinds of fits nearly the same, I shall defer it till I have laid down the method of treating the different fits during which a physician is desired to attend.

Method of curing the Fits partly caused by a Superabundance of the Humours in general.

The occasional causes of the superabundance of the humours in general, being, as I have already observed, very many, I flatter myself with being excused from treating particularly of all the different

ferent fits that may be caused by such a superabundance. The regular physician will think it sufficient to be reminded, that these different causes may occasion a fit, that he may attempt the cure proper to its circumstances, and when called to such fits, not commit any gross errors in his endeavours to procure relief. I shall, however, lay down a rule necessary to be observed in the treatment of the most common fits, and which is not attended either with danger to the patient's life, or the reputation of the physician.

When you are convinced that the fit is caused by a defect of perspiration, which is the most general cause, all endeavours are to be used for restoring it, that the fit may be less compounded and the time of its continuance shortened; for this circumstance is always attended with some advantage, but no risk must be run in order to attain it.

In

In a gout sensible only of cold, nothing is easier, the gouty humour is sufficiently macerated, so that nothing is wanting but to increase the motion of the blood so as to produce a gentle sweat. This will be sufficient to destroy the superabundance, and this is easily compassed, even in the beginning of the fit, by the above mentioned sudorifics. Purgatives are to succeed the sudorifics in due time, and the former are to be adapted to the constitution of the patient. Here the chrystals of tartar may be used with great success, as they evacuate ferocities.

To these two remedies the whole treatment may be confined, unless bleeding, in some particular circumstances, be required; but this is very rare, except in women and persons habituated to it. Opiates are to be entirely excluded; for if they suspend the pains, they at the same time suspend the evacuations.

With

With regard to the regimen it must not be more nutritive than in the foregoing case ; not that the distemper of itself requires a very exact diet, but the organs of digestion perform their functions imperfectly, whenever sharp and almost continual pains are felt in any part ; and thus the food, instead of strengthening, for the most part, weakens the patient.

If the gout be sensible of heat, the treatment must not proceed so fast. The patient, indeed, will suffer more, and for a longer time ; but there is much less danger from his sufferings, than from a too precipitate endeavour to procure him relief. The regimen must in this case be very severe, he must take diluents in great quantities, as they will by that means procure the same advantages as diaphoretics or gentle sudorifics, by macerating the gouty humour, which will by that means be rendered fit to be evacuated by perspiration.

A respite being attained, purgatives must be called in, but of the gentle kind; it being better, as Alexander Trallianus observes, that the gouty humour when too gross, and too dense, be gradually evacuated, than to attempt a total extermination of it at once; and the rather, as this humour, when deprived of its aqueous particles either by strong purgatives or sudorifics, becomes much more obstinate and untractable.

If the fit proceeds from a suppression of the hæmorrhoids, endeavours must be used for restoring them, by bleeding in the foot, or the application of leeches to the anus, there being then a plenitude of blood. Not that I think the vessels ever possess more than they can contain naturally, but it will doubtless be granted, that they may contain a much greater quantity of this blood than they ought, without any disorder of the animal œconomy. In case of a supereun-

bundance, such remedies are to be employed to diminish it, as are proper to produce the desired effect naturally and easily. In this case nothing is more proper than bleeding or restoring the suppressed evacuation; at the same time diluents are convenient during the exacerbation of the pains, and gentle purgatives after they are ceased.

When the fit is attended with a defective secretion of the bile, or its reflux into the mass of blood, these are to be looked upon as the cause of it; consequently this secretion is to be restored by bitter diluents, as thin apozems quickened with one or two drams of Glauber's salt. The febrifuges of the antients may also be advantageously used. Purgatives are by no means to be neglected, being more useful and necessary than is easily imagined. Those medicines are to be chosen which evacuate the bile rather than any humours; as senna, Glauber's salt dissolved in the distilled waters of the lesser centaury and german-

der, with a small quantity of manna, the whole filtrated and dulcified with some syrup, as that of apples or wild endive.

If the urinary evacuation be in less quantity than usual, it will be necessary to use mild diuretics, such as infusions of the above plants, or rather of wood betony, eight leaves in a pound of common water, or a light ptisan having a small quantity of nitre dissolved in it.

There would be no end of enumerating all the remedies that may be proper for every different fit, and therefore I shall omit them; and the rather as they are ranged in their natural classes in most books that treat of the virtues of medicines.

In every fit the cause of the superabundance is to be opposed, and the superabundance itself removed. By pursuing such methods the fits are rendered shorter, less compound, and the
animal

animal œconomy suffers less from them, especially if the great difference between the gout sensible to cold, and that sensible to heat be duly heeded.

The fits occasioned by the superabundance of the humours in general require a different method of treatment from that just laid down. Bleeding must be used with great caution, or only on an absolute necessity, and opiates must be totally excluded.

It is always to be feared that bleeding, by the relaxation it occasions, may too much weaken the efforts made by nature for her relief. On the other hand, opiates infallibly obstruct nature, and are moreover seldom convenient previous to the evacuation of the superabundant humours, which may also have contracted some ill quality; a thing not uncommon in this kind of fits.

*Method of curing the Fits caused by the
false Superabundance of the gouty Hu-
mour.*

The fits caused by the false superabundance of the gouty humour, are generally the least painful; but there are some not easily treated, and of which the cure is sometimes even impracticable.

I have distinguished the causes of the false superabundance into two kinds: the first begins by extending the vessels beyond their natural elasticity, and this tension is followed by a relaxation. As a fit from this origin is never very violent, and often the effect of an accidental debauch, which has put the humours in motion, it is sufficient to correct this extraordinary impetuosity of the humours by some internal refrigerants. It is proper to observe here that I have only yet spoke of internal remedies. Nothing is better
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for this purpose than an infusion of the leaves of wild endive; for I entirely subscribe to Hippocrates, who, in this case, prefers medicines administered by infusion to all the other methods of preparing them, tho' he does not alledge any reason; but I add, that they best macerate the gouty humour, and the salts of infusions are more active than when mixed, or rather sheathed, with mucilaginous or earthy particles, as they must, in general be, when the plants are a long time boiled.

Besides, nothing contributes more to correct the activity of all sorts of spirituous liquors, than a very large quantity of water; and when at the same time it is largely impregnated with active salts, which they generally are when extracted by infusion, it is rendered still more effectual for destroying the gouty humour.

If the fit has been brought on by a gust of passion, I know nothing better than a

common small lemonade, made by slicing a lemon and infusing it in about two quarts of water, and sweetened with a little sugar, pouring it briskly several times from one vessel into another.

Here I declare against old prejudices and do not hesitate to use acids in a distemper which they can only produce accidentally; liquors that contain the most being not likely to occasion the gout.

An excess of joy or over violent exercise scarce deserve attention; the fits they bring on being seldom either very painful or lasting; and must be treated according to the general effect they may have had on the animal œconomy.

But fits produced simply by a relaxation without any other preceding cause, require the closest attention. Here diluents are to be laid aside, and recourse had
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to cordials only ; nor is the choice of them a matter of indifference. Those which, at the same time that they restore the elasticity of the solids, and increase the motion of the fluids, destroy also the small quantity of gouty humour in the vessels, are to be used preferably to all others ; and this triple advantage is found in the best Canary, Burgundy and Champaign wines ; the use of which must be determined by circumstances, especially when the evacuations are too copious ; and if the fit has been preceded, or is attended by a hemorrhage the care and circumspection must be still greater.

Hitherto I have not mentioned purgatives, tho' in this case they are necessary, and attended with proper success. The most gentle of these, however, are to be made use of, and therefore must be the oftner repeated ; the interval between them being proportioned to the nature of the distemper and the state of the patient. This is

in general the conduct I would recommend to a physician for the different fits he may be required to attend, in case nature should stand in need of his assistance; for otherwise she should be left to herself especially at the beginning of fits. The physician's first care should be to diminish the superabundance which has produced the fit, but without offering any obstruction to the efforts of nature, or interrupting her in her operations. The medicines he prescribes must rather assist than oppose nature, who, I am satisfied, acts with the greatest wisdom and prudence, especially when she finds herself attacked by the gout in a regular manner.

CHAP. III.

Of the Use of Topics.

IT may be thought an omission that in the many remedies I have mentioned for procuring relief in the different kinds of fits, nothing has been said with regard to topics, or medicines applied to the part affected; whilst the patient wishes for nothing so ardently, imagining that all relief from their excruciating pains must come from such applications; as if gouty tumors were like all others, where topics are indeed necessary, and always attended with success. That nothing may be wanting, I shall lay before the reader those topics which are injudiciously used, and those from which, in the different cases, some success may be expected.

To avoid a tedious detail I shall reduce all topical remedies to three classes, viz.

I. Re-

1. Repellents, which are very numerous ;
2. Emollients ; 3. Resolvents ; all the topical remedies mentioned by authors, partaking of one or other of these qualities.

The repellents which are astringent, or fortifying, are those which dislodge the humour from the part to which they are applied, and these in the gout are very pernicious and dangerous. But I shall say no more of these, they having been exploded, and very justly ; for they usually turn a regular gout to an irregular, by which the patients are too often suffocated.

The emollients seem often to procure some relief, being usually applied warm to such tumors as are sensible of cold. The most common are poultices composed of bread and milk or emollient herbs ; but what ease is procured is no more than a relaxation of the fibres ; and, an attenuation of the gouty humour by which
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it may be the more easily transpired thro' the pores of the skin, an advantage which should not outweigh the dangers incurred by their use; for either the degree of heat or cold, whatever it be, is more than sufficient to render these topics repellents, especially if the precipitation of the moleculæ of the gouty humour be not in any great forwardness, and the deposition but imperfectly formed; seeing if these topics, are too cold or too hot, they always occasion an extraordinary motion in the fibres of the vessels, whereby they become less proper for receiving a deposition. As this deposition cannot be now fixed in the articulation intended by nature, it is carried away by the blood and thrown on some other part, where it fixes, and often causes terrible exacerbations, from the parts not being adapted to receive such a humour. Besides, these remedies cannot be used in the gout sensible only of heat, nor in that sensible both of heat and cold at the same time; because whether they are,
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in these cafes, applied hot or cold, it is always to be feared, that they will divert the gouty humour, and hinder it from fettling in the articulation destined to it by nature.

The last class is resolvents, which may be divided into two species, the simple and the anodyne. It is very rare that the former are found entirely destitute of a repellent quality; the latter, besides the paucity of them, are, at the same time, too weak to promise any success. These are decoctions of camomile, melilot, and elderflowers, plantane, rose leaves, and fœnugreek seed; but the effect of these remedies is only perceived in those organical parts, that are tonical, as the eyes when inflamed, or the skin under an eresipelas.

They are not penetrating enough to dissolve a humour, defended from their action by muscles, tendons, and tendinous membranes. I should therefore think it
would

would be adviseable wholly to reject these remedies, as they cannot act in the gout, but from their coldness or heat, whence their effect is always very uncertain, and sometimes equally pernicious with repellents.

The time proper for employing all these remedies, without any apprehension of bad consequences, is immediately after the precipitation of the *moleculæ* of the gouty humour, and the complete formation of the tumor; but they are then superfluous, the pains intended to be assuaged abate of themselves so sensibly, that no gouty person was ever known to be anxious for ease in this stage of the distemper. So that as these remedies can prove only hurtful, or at least, useless and clogging, they should have no place in the treatment of the gout.

It is well known, that a topic, applied cold on a part affected by the gout, checks the formation of the tumor; and that,
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Some time after, the tumor always deposits itself on some other part. The cause of this is, that the cold constringes the part affected and the vessels which lubricate it, so that they are no longer fit for receiving a deposition. The cold also augments the elasticity, so that the humour cannot continue there, and the rather as other vessels less elastic offer a greater capacity to the same humour.

Heat produces the same effect, but in a very different manner, it enlarging the volume of the humours. This however would not be of any bad consequence, provided it was universal; that is, if the whole body was equally acted upon by the heat; but, with regard to topics, one part only is affected, and that very part from which, naturally, and for the patient's safety, it should be withheld.

Let me be indulged in relating here a very striking instance of a gout translated
by

by the application of a too warm topic, which has hitherto been thought very indifferent, not to say innocent.

On the 14th of May 1749, I was consulted by a gentlewoman of about forty-six years of age, who had been subject to the regular gout from her thirty-seventh year, of a strong but phlegmatic constitution, and who had never indulged herself in any excess. Her fits had hitherto been only the most simple; but vexed and fretful at being afflicted with this distemper so undeservedly, she consulted all except physicians; and all, as is too common, were very liberal of their advice. She embraced that given her by a person, who persuaded her that her gout was occasioned by a coldness in her feet, to which she was very subject, so as even to feel it for a considerable time after she was in bed; but that it might be easily removed, by causing a globular vessel of tin, filled with hot water, to be put in her bed, for by this means

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her feet would be kept in a proper degree of heat, and effectually prevent all gouty symptoms. The patient made use of this remedy during the winter of 1749, and passed the month of February without any regular fit, tho' they constantly used to attack her at that time; but the uvula, the basis of the tongue, together with all the internal and posterior parts of the mouth, became gradually so obstructed, that by the first of March she was no longer able to swallow either fluids or solids without long convulsions; by which means she was reduced to support life by only an ounce of bread and an equal quantity of wine, so that she was terribly emaciated. She little imagined that her disease was an irregular and repelled gout, having too good an opinion of his remedy to imagine it could produce such terrible consequences.

It is very certain that the translated gout in this gentlewoman was owing to the tin vessel, which, by heating her feet, too
much

much increased the elasticity of the vessels of those parts; that this factitious and local spring obstructed the precipitation of the *moleculæ* of the gouty humour, when it would otherwise have been performed; that this gouty humour had been thrown back upon the tongue and the uvula, their vessels then being in a state of debility, a thing not uncommon in winter.

So that, I again repeat it, heat and cold are often pernicious to gouty persons, when either these two opposites are directed only to act upon the parts appointed to receive the gouty humour.

I do not, however, deny that there are some topical remedies, which, even at the beginning of the fit, and during the precipitation of the masses, may be applied without any danger. Some there are which even have a tendency to promote and favour it; such as the urine of a child something under ten years of age; this is

T anodyne,

anodyne, resolvent, and active, without partaking of any of these qualities in too great a degree. The part affected is to be bathed with the urine by means of linen rags well soaked in it, and afterwards laid on the part, care being taken that the urine be of proper heat. The water of which it is composed relaxes the fibres, and, at the same time, its salts dissolve the gouty humour. But it ought only be used in the gout sensible of cold.

A more active remedy, and proper in all kinds of gout, is white soap dissolved in common water; the part affected is to be bathed with it or in it; and with this advantage, that when the patient finds the bath too cold its heat may be gradually increased by pouring in more hot water. The gout sensible only to heat, and that sensible both of cold and heat at the same time, are the only cases which require precaution, and that the degree of the heat of the bath do not exceed that of the human

man body. All mistakes are here easily prevented by allowing the patient previously to dip his hand into the water for a minute.

Five or six ounces of soap is to be dissolved in fourteen or sixteen pints of hot water, and left to cool till the hand can be borne in it; after which the part affected is to be put in and continued there as long as the patient can support it, warm water being added as the bath cools. I never observed nature disturbed in her operations by this process; but have been a witness of the constant relief received from it.

This topic, except in the manner of using it, is not a modern invention. Alexander Trallianus commends it highly; but more ancient physicians, as Ætius, declare, that they have used, with great success, cataplasms of different plants, with oil and lime in different quantities, which always produces a saponaceous compound.

To answer all the intentions, soap is sufficient, and more advantageous, in being used by itself; seeing the virtues of the cataplasms of the ancients solely depended on the alkaline salts and oils, which are the basis of them. If these cataplasms sometimes proved ineffectual, it was owing to some injury which the salts has sustained by the ebullition they underwent with the plants, in order to reduce them to a viscus substance; and besides they always lose their activity by being dissolved in a large quantity of water, an inconvenience unavoidable in reducing these plants to the state I have described.

The defect of these remedies Alexander Trallianus must have been aware of, because he expressly recommends as a true specific the soap of Gaul; the only country where it was at that time made.

The virtue of these topics indeed wholly depends on the alkaline salts, tho' if administered

ministrated alone they would produce terrible effects; but being intimately blended with oils are so far from being dangerous, that they acquire a faculty of penetrating farther into the parts, and of dissolving more easily the dense and coagulated humours.

Boerhaave, who understood its nature and knew its value, has affirmed soap to be an universal dissolvent, the most active and powerful in nature, and from which, when prudently administered, nothing is to be feared.

In circumstances that do not admit of bathing, relief must be sought by other means. For the gout sensible of cold emollient cataplasms mixed with soap may be permitted, taking care, that the latter be added to the decoction but a small time before it is taken from the fire. In the gout sensible of heat, soap alone is to be used, reduced to a paste, which

being thoroughly mixed with any unctuous and more liquid body than itself, as butter of Cacao, spreads easily on linen; this, after warming it a little, is to be applied to the part affected, and renewed twice every day during the fit. But when the fit is over, if the tumors do not entirely disappear, but leave nodes of any kind, the use of this topic is to be continued till they are wholly dispersed. The most convenient way of doing this is by spreading this cataplasm on linen socks and wearing them on the feet, if the nodes remain there; but if on the hands, gloves are to be used in the same manner, and the hands continued in them, especially all the night.

This is a remedy which no nodes can resist. If the matter of them be still mucilaginous it gradually reassumes its original fluidity, mixes in part with the mass of humours, and in part evaporates by perspiration. If the matter be so gross and desiccated as to assume the form of
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mortar, or white earth, it passes thro' the small interstices made in the skin, and thus the articulation is freed from it.

Before I close this chapter it may not be improper to observe, that in the treatment of the sciatica, the stronger purgatives may be admitted, as jalap or diagridium, in moderate doses often repeated; for they have very often happy effects, and are seldom if ever attended with danger.

Topics may also be classed among aromatics and strengtheners, because before their action hath reached the seat of the disease, which lies very deep, the virtue of them is entirely lost; and the good they then do is, that by increasing the elasticity of the parts adjacent to those which are affected, they also communicate, in their turn, a portion of it to them, and render them more proper for comminuting and dispersing the inspissated humour inclosed in them. The augmentation of the elas-

ticity in the parts furrounding the cavity of the acetabulum, contributes no less to reduce the volume of the humours lodged within this cavity, and to comminute them, than a want of elasticity in the circumambient parts tends to support the superabundance of that humour. In the last case this effect is not questioned, and daily experience proves it in the former.

C H A P. IV.

Method of curing the Gout.

THE method of curing the gout must not be thought limited to the conduct observed at the time that this disease declares itself by regular fits; if I have not taken notice of it hitherto it is only because it is sometimes necessary to assist nature; but generally nature does not, at that time, stand in need of the assistance of art, especially in the first attacks of this distemper; and therefore any attempts
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to assist her would only tend to interrupt her in her operations, which should always be avoided.

Accordingly, before I proceed further, I would lay it down as a principle, that the cure of fits is not to be attempted, except nature seems to call for the assistance of art, to render the fits regular, or to avert those dangers which the fits might otherwise be attended with. It is not a knowledge of the surest methods of acting in concert with nature, and a success in applying them, that constitute the whole duty of a physician, who has undertaken the care of a gouty patient. The gouty humour indeed seems utterly destroyed, and as it were annihilated, at the period of the fit, which the superabundance of it had caused; but many more are to be expected, and will infallibly come on, if all possible endeavours be not used for extirpating this humour; or, at least, for preventing it from producing, by its super-

perabundance, after a fixed and limited time, subsequent fits, sometimes longer or more compounded, and always more dangerous than the first.

Here it is that the physician's abilities shine ; he is the sole agent, nature has no share with him in the deserved honour he acquires in the absolute conquest of this distemper ; for in this juncture he may govern it and command it as he pleases, and it punctually obeys him ; if, on the other hand, the patient is pleased to listen to the good advice and conform to the wholesome rules prescribed him.

The fits of the gout derive their origin from the existence of mucilaginous particles in the mass of humours, and at the same time from their superabundance whether true or false. These two causes are absolutely necessary for the gouty humour to manifest itself by fits ; without the mucilage there can never be a fit of the gout,
neither

neither can there be one without a superabundant quantity of this mucilage. Thus the gouty humour may be prevented by two very different methods from declaring itself by fits whether regular or irregular. For this may be performed, either by preventing the superabundance of this humour, or by totally destroying it.

I am not ignorant, that by accomplishing the latter the physician is excused from paying any attention to the former; that it is even the surest method of obtaining the end proposed; but we are not always to make use of the most expeditious and most certain remedies; obstacles too often occur which must not be removed, especially among such gouty patients as have any cutaneous distempers, as tetters and erisipelas. To endeavour wholly to extirpate the gouty humour, without having regard to these distempers, may be dangerous; and this would be inexcusable when the gout may be kept off by more
safe

safe tho' less sure methods, as tending only to prevent a superabundance of the gouty humour. Here an objection rises, why I do not make the treatment of the gout to consist solely in the remedies for preventing the superabundance of the gouty humour, as they may be effectual, and the use of them cannot be attended with any danger. I answer, that these remedies very often fail, because the physician cannot always promise himself to secure many patients from the causes of the superabundance of this humour; and that it is often out of the power of the patients themselves to guard against it.

It is, in truth, a matter of great difficulty to prevent the causes of the superabundance either in a corpulent and phlegmatic state of the body, or in persons of a sedentary life; because in both these cases the perspiration is but little, and, consequently, the loss small, and the patient, often against his will, takes more nourishment

ment than is necessary to repair it. But besides, is not the distemperature of the air, exclusive of many other circumstances, independent of the will of man, sufficient to produce a superabundance? I shall farther add that it is sometimes rash to begin with attacking the first cause of the gout, when the gouty humour may be still remaining in the vessels, without giving any indications of its existence, which is common in persons where nature is past her vigour, and her usual strength greatly impaired.

Accordingly, to complete this part of the treatment, the means of preventing the superabundance of the gouty humour must be facilitated, and the remedies for the absolute destruction of this humour made known.

But previous to a particular detail of either method it will not be amiss to enumerate the general remedies subservient to
both,

both, as after the use of them, one may proceed with greater safety, and without any fear of reproach make use of that which there will be a necessity of taking.

When the violence of the fit is over, which, in those that are simple, happens in a fortnight, and in compound fits at the end of forty days at furthest, and the patient having been sufficiently purged, he must take as much exercise in the open air as possible; among these nothing exceeds walking, riding and hunting; tennis and billiards also have a very good effect; but it is, in general, only to young persons these can be recommended.

Aged persons should be advised to take the air in their coaches with the windows down, and if the wind be pretty strong, it is the better. No renewal or increase of the gouty pains is to be apprehended from these different exercises. Sydenham allows, that he never perceived the action attending

ing these exercises to increase the pains : on the contrary, he found their sharpness to be the same, whether sitting still at home or using exercise abroad. Accordingly he recommends exercise, and to pursue it vigorously, as thereby the patient will the sooner be freed from his distemper.

The reason is that the humours become more separated and attenuated by motion, and, consequently, circulate more easily, and are much sooner dispersed; whereas inactivity causes them to stagnate in the vessels, thickening and growing every day more unfit to circulate with the blood, or pass off by perspiration. Besides the dissipation is much more copious in the open air, than in a close room.

Some regularity in the regimen of life contributes greatly to keep off the gout, whether the intention be to prevent a superabundance of humours or a total destruction of the gouty humour. In order
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to this the gouty patient must be denied some meals, especially supper ; or, at most, allowed only at this meal, a few raw fruits, as apples or pears, with some glasses of good wine ; for cyder, beer, spirituous liquors, and spumous wines, such as Champaign, and the like, must be absolutely avoided:

At the other meals let gouty persons, especially if they use little exercise when in health, be advised to make use of aliments that contain little nourishment. They should prefer light fish, as whiting, carp, and pike, to all butcher's meat ; wild fowl to poultry ; and never eat, or at least very sparingly, any fat fish, as eels. They must entirely renounce farinaceous vegetables, as beans, peas, and lentiles ; and confine themselves to such as contain a large quantity of water, as pot herbs, cellery, artichokes, and colliflowers well boiled.

To gouty persons, who use a great deal of exercise, these restrictions may be mitigated ;

tigated; only let them abstain from succulent food, and fat meats, but more especially from jellies, soups, and strong broths. All kinds of game they may be permitted, provided there are no particular reasons against them.

Gouty persons cannot, at this time, drink too plentifully, and the most proper liquid for them is that which they made use of during their last fit; unless the physician shall think it more expedient to prescribe another.

A gouty person, who has duly attended to advice, and punctually observed all the prescriptions of his physician, will not be long before he enjoys the pleasure of a total delivery from his late fit, and is besides in a fair way towards the perfect cure of his distemper. But no time is to be lost, these moments that are nearest the past fits being most advantageous to secure the patient from further returns, with which

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he would undoubtedly be attacked; if he remains inactive and secure, upon the presumption of being entirely cured.

C H A P. V.

Of the Means of securing the Patient from attacks of the Gout, by preventing the Superabundance of the gouty Humour.

THE remedies for preventing a superabundance of the gouty humour, should be the same with those employed for diminishing it, even at the time when the fit is still felt; but with this difference, that in treating the fit of the gout, care should be taken not to disturb nature, in order to which the gentlest remedies are to be made use of. On the contrary, to secure the patient from fresh fits, it is very allowable, and even necessary to have recourse to more active remedies. They should, indeed, always be of the same class

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class with those that procured relief in the last fit.

Therefore when a patient, of a phlegmatic constitution, is afflicted with a gout sensible of cold, resinous purgatives, as jalap or diagrydium, must be used, and perspiration facilitated, or rather provoked by a strong infusion of Camel's Hay, but in a something less quantity if the sudorific woods are added. These remedies may also be given in substance, and their use continued for a month after the period of the fit; and afterwards from time to time, taken only for one day, and at equal intervals. Such a method carefully observed, seldom fails of keeping off the fits of the gout, for a considerable time.

Take Diagrydium	gr. iiij:
Jalap	gr. viij.
Ipecacoanha	gr. j. or ij.
Powder of Sena	g. xv.
Rhubarb	gr. x.

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Pow.

Powder the whole, mix and incorporate it in a sufficient quantity of the fyrup of buckthorn.

This is to be administred every other day.

The day following that on which the pills are taken, at the medicinal hours, the patient must drink three glassees of the sudorific ptisan.

Many gouty persons have found themselves greatly relieved by uniting these two remedies in the following manner. They use them three days successively every month of the first year, and afterwards only every three months; but to be punctually continued till they are entirely freed from the gout.

Take leaves of Sena ʒss.

Seeds of Carthamus, and of Carduus Benedictus.

Hemodactyles.

Guaiacum

Guaiacum Wood.

Sarsaparilla.

Diagrydium. ana 3ij.

Rhubarb.

Cinnamon. ana 3j.

Pulverise the whole, and mix it thoroughly. The dose is from ʒ ij. to 3j.

The purging powder against the gout, inserted in the faculty's dispensatory, which is nearly the same, produces also the same effect, and is given in the same doses.

These remedies discharge the humours by stool, and, at the same time, fit them for being carried off by perspiration, without too much increasing or forcing this last excretion, for otherwise the consequence would certainly be disagreeable. The gouty humour, deprived of its fluidity would thus become very obstinate, so as hardly to be overcome by any remedies; for then the patient may think himself very happy if the most

gentle remedies do not cause a return of the sharpness of the pains, and occasion a closer succession of fits than usual; as I have had occasion to observe in persons, who in order to evacuate the gouty humour by perspiration, had made use either of dry baths, or the strongest purgatives, especially those who had added mercury to their compositions. It is a great point in the cure not to render the gouty humour too dry, tho' it has hitherto been neglected, under pretence of its being a heterogeneous humour, and of which one cannot be too soon freed.

When the gout in a phlegmatic constitution is sensible to heat, the hydrogogues are to be more sparingly administered: gentle purges are then only to be given, and these may be more frequently administered than during the fit.

Take of the small leaves of Sena ʒij.

Vegetable salt ʒj fs.

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Infuse them in seven or eight ounces of water, together with two ounces or two ounces and a half of manna.

Strain it off, and add of the compound syrup of apples ʒj .

This is to be taken every three days, drinking plentifully of the ptisan made of the infusion of ground-pine and germander.

These remedies are to be continued till the gouty humour is sufficiently diluted, in order for its being expelled by nearly the same remedies as before mentioned, but given in smaller quantities.

In dry bilious constitutions, which are most subject to the gout, sensible to heat, the treatment must begin with the use of some ptisan having very little salt in it, and to be used plentifully. This ptisan may be made of certain bitter herbs, as ger-

mander and the lesser centaury. Pour on half a handful of these herbs, about two quarts of boiling water, which after standing a sufficient time on the herbs is to be decanted off, and drank when necessary, till the gouty humour is brought to the fluidity necessary to its expulsion by the above mentioned remedies. Here ground-pine, sage, and all hot plants, are to be excluded, and during the use of this infusion the patient is to be gently purged with better purgatives, as Sena, Rhubarb, and compound syrup of apples.

If from an excessive tension of the fibres, or an inspissation of the humours, these remedies are not attended with much success, recourse must be had to baths of a heat not exceeding that of the human body. Nothing more effectually macerates the humours, but they must be discharged very gently, in proportion as they become macerated; for otherwise new distempers may be contracted.

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The effect of these remedies is afterwards to be seconded by those of a digestive nature, which, at the same time gently purge and liquify the bile; but with this caution, that they be given only in small doses.

Take Extract of Aloes prepared with the juice of fumitory

The best gum ammoniac ana $\mathfrak{z}\text{ss}$.

Aperitive saffron of iron.

Diagrydium ana $\mathfrak{z}\text{ij}$.

Best Myrrh.

Oriental saffron.

Salt of Tamarisk ana $\mathfrak{z}\text{j}$.

Rivirius's salt of iron $\mathfrak{z}\text{j}$.

Let the whole be pulverised, carefully mixed, and incorporated in a sufficient quantity of compound syrup of succory. The dose is twelve grains, to be taken fasting in the morning, for eight days, and on the ninth, both morning and evening.

ing. Afterwards it is to be taken only once a day; unless there be a necessity of more frequent purgations, the pills are to be continued for six weeks. In case the patient be costive, he must take them constantly twice a day, and afterwards use the alterative powder against the gout described in the faculty's dispensatory. This powder is made in the following manner.

Take Gentian root.

Rhapontic.

Round Birthroot.

Leaves of Germander and of Ground-pine.

The heads of the lesser centaury, ana
3iij.

These powders being made into a bolus with a sufficient quantity of syrup, half a dram may be taken morning and evening. This has proved very beneficial to many gouty persons who took a dram of it in
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the morning in a glass of water, and only half a dram in the evening. The use of it is to be continued for a long time.

I shall not stop to explain the manner in which these remedies act, it being sufficiently known to all persons of the faculty: All therefore that remains for me to say is, that in order to secure the patient from the fits of the gout, by preventing the superabundance of the gouty humour, it is necessary to remove the causes of this superabundance, and there is no other method of doing this but by increasing the evacuations. It is seldom or never that any thing is to be feared in the gout sensible of cold; but in that sensible of heat, the cure must proceed very slowly, for the evacuations, whatever they be, will oftener increase the solidity of the gouty humour, than diminish it: unless care be taken to give this humour that fluidity, which is necessary for its passing thro' the
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different strainers that may be appointed for it.

Hitherto I have been silent with regard to the use of milk, at present so much in vogue, either for asswaging the sharpness of the pains, or totally destroying the gouty humour. I shall be told that many persons have found great relief from milk, and that some by a long use of it, have found themselves perfectly cured of the gout. Does this infer that milk is indued with a certain virtue resulting from a combination of its principles, capable of destroying the gout? For, besides of the great number of gouty persons who have had recourse to a milk diet, very few are fully satisfied with it, many have found it hurtful, it not being entirely digestible by several people. But moreover, from the many fat and mucilaginous parts it contains, it must rather tend to bring on the gout, than to be a preservative against it.

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If any person ever received any benefit from the use of this remedy, it was because he had recourse to it immediately after the first fits, which are occasioned by the superabundance of mucilaginous substances; and the use of milk continued for any time, necessarily removes the causes of the superabundance of all humours; a person obliged to live upon milk, seldom taking more nourishment than is necessary for repairing the losses he constantly sustains, and, farther, every person under a milk diet perspires a great deal more than usual: these are the true, and only methods, by which milk may procure relief; nothing more can be said in favour of it.

In any case where a perfect cure seems to be owing to it, there is as little reason to attribute such a happy effect to it, as to imagine one single bleeding or purgation, are adequate remedies in the gout; yet,

yet, the gouty persons perfectly cured by these within mine own knowledge, are at least equal in number to those who owe their happiness to milk.

In fine, after all the pompous encomiums on milk, bleeding, purging, chalybeats, &c. it is only by producing one and the same effect, that all those remedies can procure relief in the gout. They only preserve nature from the causes of the superabundance, and thus sometimes procure her a facility of destroying herself the primordial cause of the gout. What virtue they have is common to them all, and has no contrariety to the nature of this distemper.

Milk, however is experienced to have a more certain and known success among those who live high, as they are by its use obliged to abate of their usual quantity of nourishment.

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Among those who eat little, its insufficiency is no less evident. Their tortures are as sharp and frequent as they were before they used milk; and this is a convincing proof, that milk in itself has no particular power of extirpating the gout; since all the relief it procures in this distemper, is, like that of many other remedies, purely accidental.

C H A P. VI.

Of the Means of preserving from the Attacks of the Gout, by removing the first Cause.

THE first cause of the gout is a superabundance of mucilaginous particles, heterogeneous to the mass of humours. It is single, and one single remedy is sufficient to remove it, provided it contains an adequate quantity of salts; because where salts abound no mucilage can subsist. But this salt must be conveyed into the blood, and circulate with it with-

without alteration; for very often the gouty humour, resides in small vessels, remote from the heart, and it is not till after a long time that the remedies can reach and pass through them, these vessels being, in general, filled up by the desiccation of the gouty humour.

All these advantages are to be found only in a medicine compounded of a fixed and very pure alkaline salt prepared with quicklime, which gives it a great activity, and very pure olive oil; the oil is to be placed in a vessel over the fire, and during its boiling, as much of the salt thrown in, as is sufficient to form a very white mass, known by the name of medicinal soap. This soap is very easily prepared; for if there be too much oil, the surplus instead of coagulating, floats on the surface; if, on the contrary, the excess is in the salt, the surplus subsides to the bottom of the vessel, entirely separated from the mass.

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Whoever desires a more circumstantial account of all the properties and power of this remedy, may consult Boerhaave's chemistry; it being my province only to specify the virtues which qualify it for destroying the gout, even after compound fits.

1. According to that great writer, it is an universal dissolvent, the most powerful, and most active, in all nature.

2. It easily penetrates into the blood vessels, and there undergoes the laws of circulation.

3. When mixed with the mass of humours, it renders them more analogous to each other, while they flow promiscuously in the vessels.

4. After passing thro' all the meanders of the human body it empties itself without any alteration, and almost

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in as great a quantity as it entered the body, leaving behind of its proper substance, no more than what is necessary for dissolving the gross particles mixt with the juices in the vessels it met with in its passage.

5. It augments the elasticity of the vessels by the slight irritation it excites in them, and thus renders them more able to divide and attenuate the gross mucilaginous humours stagnating in their channels.

Is any thing farther necessary to destroy the gouty humour? Certainly no. Experience has put it beyond all doubt.

This remedy is to be preferred to any other; and the rather, as it is probably the only one proper in all kinds of gout, whether sensible of cold, or sensible of heat. It may be given immediately after the fit is over. It answers all the indications
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which generally occur in this distemper; observing, however, to administer only small doses in certain cases, where its activity might be detrimental; but these cases are rare, and only in persons naturally thin, of a hot constitution, and, at the same time subject to a gout extremely sensible of heat. Here the humours must previously be macerated, and the fibres relaxed by a copious use of diluents.

This medicinal soap likewise facilitates all secretions and excretions, without forcing them; and causes all these phenomena only by imparting to the juices their natural fluidity.

Oil, however, being one of the constituting parts of this compound, by its unctuousness may impede the action of the digestive juices, which must always be supported in their full vigour. This remedy, therefore, ought not to be administered so simple as I have described it: it should be

accompanied with others, which have a tendency to quicken the action of the stomach, such as gentian, rhubarb, sometimes diagyridium, jalap, and some of the powders that I have already mentioned.

Take of this saponaceous mass 3℥s.

Rhubarb and gentian, ana gr. x.

Pound the whole in a marble mortar, and mix it thoroughly, adding a small quantity of any purgative syrup; and let this bolus be taken every morning for a fortnight, drinking after it the germander or groundpine ptisan, according to the nature of the distemper.

Afterwards it is to be taken during a whole month, morning and evening; and at the end of the month once a day for a fortnight; after which, morning and evening for another month; and in this manner it is to be continued as long as necessary, taking from time to time some gen-

the purges, which are sufficient to carry off any fabulous matter, this remedy may sometimes occasion in the stomach, from the oil which is one of its constituent parts, and therefore cannot be left out.

If particular reasons require purges of another kind, as when the person is phlegmatic, instead of the rhubarb and gentian ordered in the bolus, four or five grains of diagrydium, and six or seven of jalap ought to be substituted. Several purges also which I have mentioned may be used, whenever they are necessary, or as circumstances may require.

In the purgative bolus the soap may be added, but not in liquid medicines. The patient may return to the use of this remedy the very next day after being purged, and intermit the use of it any day whenever it may be necessary to take another purgative.

This remedy, on account of its great activity, is to be used with the greatest precautions by patients afflicted with any cutaneous distemper. The same circumspection is also necessary in persons whose humours may be vitiated by any particular acrimony, as the scurvy. In fine, this remedy, properly suits those only who have no other distemper but the gout, abstracted from any other disease.

The primordial cause of the gout being a long time in forming, and its progress during its beginning imperceptible, because nature, then in the full possession of all her powers, constantly opposes its formation; the natural consequence is, that this cause increasing, nature has been forced to give way to it, and thus it becomes no easy task to destroy it; nor will any other medicine except this saponaceous one be sufficient for the purpose.

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For tho' the soap taken inwardly may immediately destroy great part of the gouty humour, it is never to be administered but when nature wants strength to assist her, to oppose the increase of that humour. Hence it is plain that this remedy must produce two considerable effects. 1. It must, of itself, destroy the gouty humour. 2. It must impart to nature sufficient strength to oppose the generation of the humour; but this is not to be expected till after a continued use of it.

C H A P VII.

Of the irregular Gout in general.

WHENEVER the gout attacks any other parts than the articulations, it is irregular; whether it affects the extremities and trunk at the same time, or be limited to the trunk alone; or lastly, if it settles on any of the viscera,

The first cause of this irregularity, is the insufficiency of nature's efforts for removing the obstacles it meets with in the articulations of the extremities, at the very time when the gouty humour has attained that degree of superabundance, which always lays nature under a necessity of freeing herself from it.

This insufficiency of nature's efforts, may be either natural or accidental. The natural insufficiency is that which flows from the constitution and state of the human body: the accidental must be owing to some extraneous cause, not naturally existing in man.

Among the causes of accidental insufficiency, the principal is, the mistaken use made by gouty persons of repelling topics, whether that quality proceeds from the combination of their principles, or results from the degree of heat or cold residing in these medicines, on their application
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to the parts already affected by the gout.

An irregular gout is always the consequence of them, especially if used at the beginning of the precipitation of the gouty moleculæ, or while the deposition is not yet sufficiently formed in the part appointed for it by nature.

Secondly, among these causes may be ranked, a too great, and lasting degree of cold, or an extraordinary degree of heat too long continued, felt by the part appointed to receive the gouty humour, when in the circumstances above mentioned.

Having already spoken largely on this head in treating particularly of topical medicines, I think I may be excused from adding the reasons in this place.

I shall, therefore, proceed to the causes of the insufficiency of nature ; and these
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are three. 1. The insufficiency may be owing to an equal resistance the gouty humour meets with in all the articulations, which can only happen to young persons, who have never had a fit of the gout. 2. In aged persons who have endured a great number of fits, it results from the obstructions formed in the articulations, by the gouty humuor, during its long continuance there; and its inspissation almost to solidity, hinders its being dispersed. 3. A third cause of the insufficiency of nature flows from the debility of the internal parts, from whatever cause it may proceed; whence nature is obliged to deposite the gouty humour in other parts, tho' the obstacles she meets with are only natural, and which she had often before overcome. This is the reason why aged persons, and those of a very tender constitution, are subject to the irregular gout.

But whatever be the causes of nature's insufficiency; whatever kind of irregular
gout

gout it be, there must always be a great analogy between the part affected and the articulations, either with regard to its functions, or the qualities of the juices by which it is lubricated.

The most usual symptoms in all kinds of irregular gout, are pains in the part affected, the deposition, and watchings. The state of the pulse varies according to the kinds of irregularity, and all the other symptoms differ according to the parts attacked by the gouty humour. The gout may then, however, be said to be a mere Proteus, concealing itself under the appearance of all distempers, as very often occasioning in the part affected all the distempers it is liable to from other causes.

The diagnostic in the irregular gout is not difficult ; the patient complains of pain in some particular part ; and the fever, in general, is not equal to the violence of the
pains

pains he feels ; but to guard against mistakes the pains must all be supposed to proceed from the gouty humour, as in all distempers, which may happen to gouty persons, the gouty humour has a considerable part.

With regard to the prognostic, it cannot fail of being always more painful to the body than that of the regular gout, but different in proportion as the part affected is more or less noble. The more necessary the part is to life, the more is the gouty humour to be feared ; and much more when it settles at once and in a large quantity, than in a gradual deposition ; because then it leaves no time for diverting some of the humour to another part ; and the most powerful remedies, in this case, often fail of success.

The first attention of a physician, in treating an irregular gout, must be to do all in his power to render it regular ; in order to which the most usual method is
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to apply topics of various kinds, but the safest are those which raise vesicles attended with a redness on the skin. It is, however, often impossible to have recourse to such topics, and, sometimes, when there is a possibility, it is improper. Farther, the method of cure must vary according to the seat of the gouty humour, the kind of distemper under the form of which it appears, the constitution, and strength of the patient.

These are all the general indications to be observed in all kinds of the irregular gout; a detail of the particular indications would oblige me to consider all known distempers; I shall therefore reduce all the kinds of irregularity to five. 1. The indeterminate gout. 2. The wandring gout. 3. The gout accidentally translated. 4. The gout spontaneously translated. 5. The irregular gout, properly so called. And these are sufficient; for whatever be the
kind

the kind of irregular gout, it necessarily belongs to one of these classes.

C H A P. VIII.

Of the indeterminate Gout.

THE kind of irregular gout which approaches nearest to the regular, is that which seizes almost every articulation of the human body, and called indeterminate from the gouty humour equally presenting itself to all parts, without appearing to affect any one more than another.

This kind may flow from the two first causes of the natural insufficiency, one caused by the too great elasticity of the vessels belonging to the vessels of the extremities, and can take place only in young persons who have been exempt from any fit of the gout. The other, which is very common among the aged, is the want
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of capacity in the vessels of the articulations, which have suffered so much from the gout, as to be, as it were, choaked up; and consequently little adapted to receive a deposition of the gouty humour, which being absolutely necessary to be done is distributed to all the articulations; and sometimes even to all the organical parts of the human body: as the gout could not manifest itself by a regular fit, yet all the symptoms which indicate the regular gout, preceded the irregular fit. And why should they not precede it? It is irregular only because obstacles were found in the extremities which nature could not surmount. Accordingly it is preceded by nausea, spasms, spontaneous lassitudes, and most of the other symptoms declarative of the gout.

The symptoms accompanying this fit are very numerous, but those particularly annexed to it are sharp pains felt, almost at the same time, in all the articulations affected;

affected; and which are increased by the natural motions of these articulations. The pulse is the same as in the regular gout, varying according to the acuteness of the pains. What is very singular here is, that the patient can lie only on his back, any other position being insupportable to him. He continues in a kind of general immobility, and dreads being stirred, because the least motion increases his torture, which seems to be much less whilst he continues motionless.

After this circumstantial account, there can be no difficulty in the diagnostic; several parts are equally affected, and almost at the same time. This distemper can, at farthest, only be confounded with the rheumatism, but in the latter, the pains when so greatly dispersed, are not so sharp.

The diagnostic of the causes is also very easy. Let the patient be asked whether he has ever had a fit of the gout, or whether

ther he has had many; for this irregularity only takes place in these two cases. In the former the cause of the insufficiency of nature's efforts flows from the too great elasticity of the vessels: in the latter the insufficiency is owing to the obstruction in the vessels.

This irregular gout being that which has the greatest affinity to the regular, the prognostic must also be very nearly the same. If it becomes more complicated it must be owing either to the misconduct of the patient, or to the unseasonable use of some topic, in which patients are, with too much facility, indulged, in order to procure them the relief they desire; but which very often endangers their lives. However, if at the first feeling of the gout it declares itself in this manner, no remedies are necessary, nature will easily surmount it without the assistance of art. On the contrary, where the fit is caused by the obstructions of the articulations, it

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may be very dangerous to leave nature to herself; as she might find some of the noble parts much weakened, in which case she would not fail to precipitate on them the superabundance of the gouty humour, which oppresses her, especially as no other part offers itself for the deposition.

The cure of this distemper depends entirely on assisting the efforts of nature for her relief, and enabling her to precipitate the gouty humour on the parts at the greatest distance from the heart, and least necessary to life. This may be accomplished by increasing the elasticity of the solids, and, at the same time, accelerating the motion of the fluids; both which are effected by the same remedies. Drinking plentifully of the same liquors as in regular fits, will, by diluting the humour, greatly contribute to the rendering it more easy to answer the actions of the solids. This is often found insufficient, and then recourse must be had to more active remedies

medies. But here cordials are always to be preferred to others, especially those which dilute, at the same time they correct the humour; as old Canary, Burgundy and Champaign, which retain nothing of their spume.

The good effects produced by them in this distemper, are scarce to be imagined; they increase the elasticity of the solids, and quicken the motions of the fluids; and as they first exert their activity in the noble parts, they secure them from any depositions that might otherwise be made there; and thus cause the humour to be deposited in an articulation, which was the original intention.

In saying that good wines are the surest remedies, I would not be understood to countenance any excess; I only mean that the patient should drink a glass every three hours, till the fit becomes regular, or arrive near its period.

I shall not prescribe any topical medicines, those which I most approved of are not proper, or rather, are dangerous in this kind of gout. It might be thought there could be no hazard in applying them to the parts most remote from the heart, in order to weaken them, and thus prepare a receptacle for the gouty humour; but this is a mistake. For in order to prevent them from having any ill consequence, they should be applied on the part or extremity which nature may have appointed for its relief; now which part this is can never be certainly known, and therefore it is more proper to omit them, being generally, if not hurtful, of no use. Bleeding is equally improper, as it would only render the efforts of nature more insufficient both in youth and age; that is, it would contribute to render the fit more dangerous.

If the indeterminate gout be rendered regular, it must be treated in the same manner

manner as if it had been always such; using cordials at the beginning, in order to strengthen the viscera, and if they have been attacked, speedily to recover them, or to defend them from a fresh attack. For by delay the success would be rendered more difficult and uncertain.

C H A P. IX.

Of the wandering Gout.

IN latter ages the name of wandering gout has been given to that kind of irregular gout, which, in a compound fit, suddenly and successively attacks different parts; and especially such as it does not usually invade.

The same name has also been applied to a species of gout, which declares itself in the articulations of the trunk, ribs, clavicles, and jaws; tho' the fit did not at

first shew itself in the articulations of the extremities.

This is a kind of irregular gout, never felt till after several regular fits, and most of them compound. This gout, like the former, proceeds from the insufficiency of nature's efforts to fix the gouty humour, in the extremities. But the only cause of this inability is the obstruction of the parts where the deposition ought naturally to have been made.

The symptoms are nearly the same as in the regular gout, as are also the signs which precede and usually accompany the fit. This cannot be otherwise; since the fit, without accidental causes in the extremities precluding the deposition of the gouty humour, would have been perfectly regular.

Any difference in the symptoms proceeds only from the part affected; thus if
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the articulations of the ribs are the seat of the distemper, the patient feels in the part affected very acute pains, and which redouble on a strong inspiration of the breath, and sometimes hinder all motion of the ribs. This pain in the ribs is so nearly similar to that which accompanies the pleurisy, that the physician would suspect it to be that distemper were the height of the fever proportionable to the acuteness of the pain.

When the deposition resides in the articulations of the trunk, the patient keeps that part in a state of immobility, as the least motion renews his pains. If the deposition is settled on the clavicles, the respiration is not performed by the elevation of the true ribs, and even the motion of false ribs is scarce perceivable; the patient being thought to respire only by the depression of the diaphragm. If the sternum has been attacked, it becomes the seat of the pain, and an unusual heaviness

is felt on the breast. Lastly, if the jaw be seized, it is always the lower, and which cannot be moved without very acute pains. Mastication can no longer be performed or even the mouth hardly opened wide enough to swallow liquids, such as ptisans and broths.

This distemper is easily known from its concomitant symptoms; the pains are the same as in the regular gout; but the parts are different, tho' with the addition of inability in the part affected for its natural functions.

The wandering gout is at first less dangerous than the indeterminate, but it may afterwards become more troublesome, as these articulations, not being made for the reception of a considerable deposition, will soon be filled and obstructed, and, consequently, even at the first fit, the humour may possibly settle on one of the viscera.

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Now, in treating a gout of this nature, two indications are to be attended to; the first is to prevent the gouty humour from depositing itself in parts, not formed for its reception; the second to facilitate the deposition of this humour on the extremities. But both intentions are to be prosecuted at the same time, every moment in this case being of the greatest consequence.

The beginning requires cordials, that nature may the more expeditiously surmount the obstacles she meets with in the extremities, and very warm cloths applied to the part affected. Heat, as I have already observed, is repercussive, when affecting one part only, and is the most convenient topic, being easily renewed as often as shall be thought proper. The feet may also be put into water of a degree of heat not much exceeding that of the human body.

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The cordials must be the same as in the indeterminate gout, which are generally sufficient for drawing part of the gouty humour into the extremity that has been bathed: tho' these medicines do not always abate the pains, felt by the presence of the humour in that part which is not the natural seat of the gout. There is often a difficulty of respiration, and in this case, recourse is to be had to anodynes, especially the old or new theriaca, according as circumstances require; the new is to be preferred if the remainder of the gouty humour drawn into the extremities has formed a considerable deposition, as then nature may be interrupted in her operations without any danger: On the contrary, if the new deposition be judged in no great forwardness, and there still remains, in the mass of juices, too great a quantity of the gouty humour, the old theriaca must be used.

Ptisans

Ptisans well saturated with salts, are very proper, especially those in which groundpine is an ingredient, being seldom found to produce any inconveniency.

C H A P. X.

Of the Gout accidentally translated.

THIS is a mere Proteus ; the gout accidentally translated conceals itself under the appearance of all kinds of distempers, rendering all the parts it affects more susceptible of the distempers to which they may be naturally subjected ; without exception.

The opening of Pandora's box did not disperse so many evils thro' the world, as this kind of gout ; which spares none of the viscera, not even those the most necessary and most essential to life. The lungs, the stomach, the intestines, the kidneys are not exempt from its tortures. On the contrary, they are very often hurt by
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the gouty humour settling there, and affecting them various ways; often, and in a moment, the distemper discovered in the part affected is new; often it is simple, distinct, marked with all its genuine characters, and generally fatal.

Excruciating pains are sometimes felt in the brain and in the liver; but in this case, there must be some other cause combined with the gouty humour. This humour, as I have before remarked, depositing itself naturally only in parts analogous to the extremities, either in the use of their functions, or when the humours which lubricate them, have the same quality as the synovia; I mean a mucilaginous quality.

All the parts above specified except the brain and liver, have no analogy with the articulations of the extremities as to their functions; but they perfectly agree in the quality of the humours which lubricate them,
and

and defend them from the irritation they might otherwise suffer from the heterogeneous substances they are obliged to admit.

Galen is, I believe, the first, who has advanced that the internal membrane of all those viscera, which are the most proper for and liable to receive a gouty disposition, was watered by a mucous, slimy, tenacious humour, such being necessary to secure it against the destructive impressions of those heterogeneous particles which pervade them.

I shall not stay to demonstrate the truth of this proposition, all authors, even the most modern, having adopted and irrefragably proved it. It has however been observed that this humour is more or less viscid according to the sensibility and natural function of the part. Thus in the lungs, which it only secures from the impression of the air we take in by respiration,

tion, it is thinner than in any other part, thicker in the stomach and intestines, as receiving heterogeneous bodies; which, tho' necessary for recruiting our daily losses, are of a different kind of roughness and solidity than the particles of air. Lastly, in the kidneys, where the urine is secreted; in the urethræ, which are the ducts of that excrementitious fluid; in the bladder, which is its reservoir; this mucus is still more dense and tenacious; as nothing less could defend those parts from irritations, which must be so much the more lancinating as the great acrimony sometimes residing in urine is sharply felt, and the natural defence of the inward surface of those canals, does not secure them from its irritations.

Accordingly the kidneys are the parts which most frequently feel the effect of the gout, causing in these viscera nephritic pains, generally more insupportable than those of the regular gout,

Erasmus

Erasmus was not mistaken, when writing to a friend of his, labouring under the gout, he told him, they had married two sisters, he himself having the stone. But what is still worse, the same person may, at the same time, be married to both these troublesome sisters.

I shall give a short account of the distempers caused by this irregular gout, in the different internal parts it seizes. A deposition of the gouty humour in the head causes quinsies, pains in the head, vertigoes, dizziness, frenzies and apoplexies.

If the humour be deposited on the lungs, the consequences are a dry cough, which is succeeded by an asthma, pleurisy, or phthisic. In the stomach this humour causes nausea, vomitings, hiccups; in the intestines, flatulencies, borborigmi, a diarrhæa, dysentery, and lastly, an inflammation of all these parts. In the liver its effects are the hepatic colic, a failure of secretion

secretion of the bile, small calculi, grains of sand, as in the kidneys.

From whence proceed such a train of distempers? I confidently affirm them to be no more than the necessary consequences of the infatuation of persons subject to the gout, who lay themselves down under a shade of prejudice, begot by ignorance, and nourished by their fatal indocility, because it favours their caprices and intemperance.

This prejudice insinuates to them, that the pains of the gout are increased by the administration of remedies; so that on the first appearance of this distemper, they obstinately refuse any. But a time soon arrives when insupportable pains convince them they have been the dupes of their own prejudice; and now they are as impatient in calling for relief. Physicians are sent for; and finding the patient in so painful a situation, prescribe mild and innocent remedies, the use of which is never attended with any danger; knowing that nature is not
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to be interrupted in her operations, and that, very often, there is less to be feared for a gouty person who complains of excruciating pains, than when his pains are slight and dull.

The patient little pleased with this conduct, tho' entirely for his good, will at any rate be relieved, he applies topical remedies, in this case more particularly dangerous, and he finds a considerable abatement in his pains, which proceeded from the abundant precipitation of the humour in that part, whence he becomes for a while elevated with this apparent success.

This exultation, however, rarely lasts long; the gouty humour remaining still in the vessels, and being precluded from reaching the extremities, is forced to deposite itself almost immediately on a noble part. And now the pains return upon the patient with more sharpness and danger

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than those he was so eager to be relieved from. He is then convinced of his error in not submitting to the judgment of his physicians, and promises a punctual docility ; but it is now too late. It is always difficult to stop the progress of a gout become no less refractory to medicines, than the patient was before to physicians.

Such are usually the effects of those remedies so much extolled, and so eagerly desired by the patients, but so justly censured by physicians. Nothing was to be feared before they were called in ; and by the use of them life is often brought into the most imminent danger, if not absolutely forfeited.

The gout accidentally translated is occasioned by the insufficiency of nature's efforts, for freeing herself from this gouty humour, by depositing it in the articulations of the extremities.

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The insufficiency in this case is to be imputed only to accidental and external causes, concurring at the same time. That is to the mistaken use of topical and repulsive medicines applied to the part affected at the beginning of the fit; or to an extraordinary degree of heat or cold to which the same part has been exposed, whether accidentally, or from the present relief the patient found by exposing the affected part to cold or heat.

The symptoms preceding this kind of irregular gout, are always the same with those which precede the regular, and the fit would naturally have been regular, had it met with no contradiction.

The symptoms which accompany this fit vary almost infinitely, so that to enumerate them it would be necessary to give a detail of all that accompany the different distempers which must follow from the gouty humour's being deposited in

some viscera, there being but one common and general symptom which attends the gouty humour wherever deposited; and that is the pain, be the degree of it what it will, which the patient feels in the part affected; and it is always proportioned to the quantity of humour deposited in it; or to the quickness with which the deposition was formed.

The diagnostics are two; that of the distemper occasioned by the translated gout I shall omit; the cause is very easy to be determined, seeing on every illness of a gouty person, especially when no other cause appears, it is always to be presumed, that the gouty humour is the cause of the distemper. The patient also may be asked whether he has not felt any pains of the gout a little before he was reduced to this state; whether he has been much troubled with spasms and nauseas; whether he has not made use of topical remedies; whether he did not feel an extreme heat or cold in the articula-

culations, during the desultory pains he felt there; lastly, if several of the symptoms preceeding the accustomed fits have appeared, the patient's distemper is indubitably caused by the gout accidentally translated.

The prognostic must, commonly, be abstruse, but it is more or less so in proportion to the circumstances. In general it should depend upon that of the distemper which the gout has occasioned.

However if the gout was not repelled till near the end of the fit, there is hopes of delivering the patient from his painful situation; and even that his distemper will not be of any long continuance; because the deposition of the humour being then inconsiderable, it cannot bring any great disorder on the part affected, and this disorder can subsist only for a certain time.

The same success may also be expected when the deposition was slowly formed, as nature not being hurried, yields insensibly without being greatly hurt. Accordingly, in these two cases, the distempers caused by the removal of the gouty humour, are neither very lasting, nor very dangerous.

It is different in a subitaneous deposition, or when formed in the beginning of the fit; nature being then surprised, or too impetuously attacked, experiences acute, dangerous, and often mortal distempers; because they allow no time for the use of remedies, tho' oftner they are too strong to be overcome by the power of medicine. However the danger and pains of the distemper will always be proportioned to the quantity of humour deposited on the viscera.

A physician, who has a well founded assurance that the distemper, on account of
which

which his attendance has been required, is caused by a gout accidentally translated, is to use all possible endeavours, and call in all the assistance of art, to bring it back to the extremities with all possible expedition. But when the most powerful resources have failed, and all his endeavours have proved abortive to procure this desired effect, other methods are to be tried for procuring relief, which can never be performed but by destroying the gouty humour in the part where it is deposited.

The first intencion should be attempted by bleeding, blisters, baths, light and mild emetics, taking cordials inwardly, a preference being given to those which are least inflammatory, and which may, at the same time, destroy part of the gouty humour.

The first step is to bleed once in the foot; bleeding in the extremities occasioning a more considerable vacuum in the

extremity where it is performed, than in the others; whence on the contraction of the heart a larger quantity of blood is conveyed to that part, there being the least resistance. But the blood in its afflux to those parts, brings with it a considerable quantity of gouty humour, which not meeting with the same resistance as before, will settle there.

As this effect does not often follow soon after the operation of bleeding, and yet cannot be too soon accomplished, its appearance is not to be waited for; but, as soon as the bleeding is over, a cataplasm of mustard seed should be applied to the other foot, or rather an epispastic plaster strewn with powder of cantharides, an æsculatory preferable to any other, on account of the quickness of its operation, which is soon perceived by its effects. Besides this advantage, it has two other qualities, by no means to be neglected in so critical a juncture: The first is that of
quickly

quickly raising vesiculæ full of humours, by which the fluids in general are equally diminished, and consequently the gouty humour. The second is the virtue of the particles of the cantharides increasing the elasticity of all the vessels in general, which is always to be excited, that the viscera, may, in all parts, make a stronger resistance to the surplus of the gouty humour, which circulates in the vessels and remains to be deposited, as it will then be in that extremity which has been weakened by the application of this topic, and by the vesicles raised there.

On the application of this topic, or two hours after the bleeding, let the patient take a gentle emetic; as warm water with a little fresh butter or oil in it. Musgrave recommends a copious drinking of tea, or an infusion of *carduus benedictus*, which I look upon to be better. These emetics do not much irritate, or weaken, but increase the circulation of the humours,
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by the reachings they occasion, and thus assist nature by assisting to the efforts she makes for her relief. I disapprove of violent emetics, as the vomiting they excite often becomes continual, from their considerable irritation on the membranes of the stomach, which are, at this stage of the distemper, inclined to an inflammation, a consequence generally promoted by these emetics.

After this evacuation, nothing is better than a few glasses of Sack, Canary, and other wines I have already mentioned. Musgrave, who may be consulted on this species of gout, always found the good effects of it in his practice, and he recommends the red wines of Portugal; but I have never had an opportunity of being well acquainted with their nature.

When, by this method of proceeding, nature is rendered capable of relieving herself by a deposition in the articula-

culations of the extremities, the treatment is to be the same as in a regular gout, but with a little more indulgence with regard to cordials, in order to preserve the viscera from a fresh deposition, and strengthen them for dissipating that with which they were affected.

It very often happens that the whole superabounding humour has settled on the viscera, and, what remains in the vessels is not sufficient to form a fresh deposition; as in this case the gout cannot become regular, the principal intention is to destroy this humour deposited on one of the viscera.

Without discontinuing the use of simple and natural cordials, tho' with some abatement in the quantity, from what it was when the gout was to be thrown back on the extremities, I would recommend mild purgatives, composed of manna, or cassia
newly

newly taken from the pods, two ounces, and an ounce of compound fyrup of endive, repeating the potion as often as necessary.

At the same time let the patient drink ptisans, impregnated lightly with salts, that they may not irritate the vessels of the part affected; which being oppilated and distended, are the more sensible of irritation. Besides it is known that when a humour is to be discharged, the first step must be to bring it to such a degree of fluidity, that it may easily pass through the necessary ducts, for which it must be sufficiently diluted, which could not be done by liquids charged with salts, as they always too speedily carry with them a considerable quantity of fluid particles in their passage thro' the different excretions; and consequently carry off only the most fluid parts of the humours. In this case the necessary consequence of the evacuation of the most fluid humour is, an increase of the

the density of the gouty humour, which of course is then the more difficult to be destroyed.

The humours being sufficiently diluted, recourse must be had to the medicinal soap; and this finishes the cure. At first the dose is to be about fifteen or twenty grains, and, if it be productive of good effects, to be increased to half a dram; but, in this case no other medicine is to be joined with it. The ptisans, however, as there is now no longer any thing to fear, may be more fully saturated with salts.

By this method the gouty humour will be attenuated, comminuted, and divided; but often without being sufficiently evacuated, which is, however, necessary; and for this purpose the patient is, during the use of these remedies, to be gently purged from time to time. I am for making use of gentle purges in this disorder, the stronger often irritating the fibres to such a degree,

degree, as to bring on very painful and dangerous distempers; as I have seen in some gouty persons, who had imprudently relied on empirics; and such as, in order to increase their profit, had used only refinous purgatives, which are always dangerous when injudiciously administered.

If all endeavours to bring back the gouty humour to the extremities should fail, the distemper caused by it is often of so critical a nature, as not to admit of time sufficient for destroying the gouty humour in the part where it is fixed, without exposing the patient's life to imminent danger. The gout must, in this case, be no longer regarded, but the distemper is to be treated according to the rules of art, till there is nothing farther to be feared from it.

It must, however, be remembered that the distemper was caused by the gout accidentally translated; and therefore it will be

be proper not to repeat bleeding too often; nor less necessary to restrain from administering drastic purgatives. Repeated bleedings and these kind of purgatives might render the elasticity of the fibres too weak and languid, and this alone would cause the efforts of nature to be more insufficient than ever. Tho' there may be an inflammation the patient is not to be denied some glasses of good wine; and the doses of about twelve or fifteen grains of the medicinal soap, are not to be omitted; as it is often known to lessen the acuteness of the pains which lancinate the viscera.

The violence of the pains felt in the viscera, is often occasioned by a mixture of the gouty humour with that necessary for lubricating these parts of the viscera. The effect of this mixture is a great inspissation of those juices with which the viscus should be continually moistened. But this inspissation necessarily hinders the secretion of the humour in the glands where
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it is to be performed, so that the internal membranes of the viscera, can be no longer irritated as usual. Some of the fibres thus deprived of their mucosity, are too much exposed, and, consequently, are very susceptible of a strong irritation, which will inevitably follow from the friction of even the softest bodies. And this is the real cause of the very worst symptoms which can attend the gout accidentally translated.

Thus there are two intentions to be answered; the first, to render the fibres, deprived of their lubricating juice, less susceptible of irritation: the second, to facilitate, in the glands, the secretion of the humour appointed for lubricating those parts.

It is evident, that we must use the remedy which, without producing any bad consequences, will answer both these intentions at the same time: and this is a
qua-

quality peculiar to the medicinal soap; its oily parts supply the want of the natural mucus, and fully perform the same functions. The salts mixed with the oil, penetrate more easily into the glands, mix with the humours contained in them, and render them more fluid, and proper for the secretions to be made from them.

In this case, nothing succeeds better than this soap, and its effect will be the more certain and speedy, if the cure of the distemper has been conducted with regularity, and agreeably to the rules of science.

Here I might close the treatment of this kind of gout; but there is a distemper which requires a particular method; I mean the quinsy, which I mentioned in the chapter of topics. This disease admits of, or rather requires, repercussives administered in gargles.

In treating a quinsy it is proper to begin with bathing the lower extremities, which must be succeeded by bleeding ; and when the repercussive gargarism is used at the same time, there is seldom any necessity for blisters. This has been my method, and, in twenty four hours, has procured relief beyond expectation, and fixed great quantities of the gouty humour in the weakened extremities. The gargarism is compounded of spirituous liquors, and medicines endued with a repercussive quality.

Take of the distilled water of periwinkle $\mathfrak{z}\text{v}$.

Kermes mineral gr. iv.

Cryстал mineral $\mathfrak{z}\text{ss}$.

Brandy $\mathfrak{z}\text{i}$.

Syrup of mulberries $\mathfrak{z}\text{i}$.

Mix the whole, and stir it well every time it is used ; and, on feeling any pains in the articulations when the gouty humour is in motion, the mouth must be often gargled with it.

If the humour be entirely settled in the parts which are the seat of the quinsy, its use is not to be continued any long time.

C H A P. XI.

Of the Gout spontaneously translated.

W H E N there is such an abundance of the gouty humour as cannot remain any longer suspended in the blood, there always follows a depuration, tho' it does not constantly terminate in a deposition in the articulations; notwithstanding no external causes appeared capable of preventing it. The precipitation of the *moleculæ* of the gouty humour is made on other parts, as on the viscera, where the deposition is formed; and then it is called a gout spontaneously translated.

This kind of gout, like the preceding, owes its existence entirely to the insuffi-

ciency of nature's efforts to lodge the gouty humour in the articulations of the extremities; but the cause of this insufficiency is very different. It arises from obstructions in the vessels of the articulations, caused by the long and frequent residence of the gouty humour in them, whilst the patient was subject to regular fits. These obstructions are very common both in aged persons and those who have endured a great number of fits. When the articulations are incapable of receiving any more of the gouty humour, nature is obliged to precipitate it elsewhere.

This deposition is not very considerable, its first ravages being much less than those which necessarily follow it when subitaneous, tho' it causes something of a tumor; to bring on a fit of this kind three other causes must concur with the first. I make no doubt but the first is a want of elasticity in the fibres, which is common to
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aged persons, and those whose constitutions are impaired. The second is the small impetus of the blood in such persons, so that the humours can scarce buoy up and disperse a small quantity of the gouty humour, especially when gross; and nature is every moment under a necessity of freeing herself from it. Thirdly, the viscus which receives the deposition, must be extremely weakened at the moment the gouty humour is precipitated. As these three causes often occur in the same person, this kind of gout is not very uncommon.

The symptoms, violence only excepted, are the same with those of the gout accidentally translated, the same parts are affected, and by the same humour; tho' they vary in proportion to the quantity and density of the gouty humour, and the rapidity with which is formed the deposition. The more abundant, or more gross it is, or the more rapidly the deposition is

made, the more obstinate, violent, and dangerous are its symptoms.

The distemper occasioned by this kind of gout, in the different viscera where the humour is deposited, not being easily discovered in its beginning, I shall explain its chief concomitant symptoms, when it attacks the viscera most essential to life.

The precipitation of the gouty humour on the lungs, brings on a slight difficulty in respiration, sometimes attended with pain; but the difficulty increases insensibly, and whatever be the quality of the gouty humour, it makes but a slow progress. The difference of this quality declares itself in another manner; a frequent cough, copious expectoration, if the gouty humour be fluid enough to pass thro' the vessels which separate the humour for lubricating the bronchia; a moist asthma is in this case to be suspected. But if the
gouty

gouty humour be too gross, the lungs by degrees are choaked up, the difficulty and shortness of breathing increases, that to facilitate it, the patient is obliged to bring his two shoulders forward; also a dry frequent cough, the expectorations are small in quantity and sanious, and afterwards purulent; so that if the quality expectorated corresponded with the state of the patient, the physician would imagine the distemper was a pulmonary consumption.

To account for all these phænomena, the causes of this distemper must be sought in the bodies of those who have died of this translated gout.

According to Fernelius, the lungs of several gouty persons have been found oppilated to such a degree, that their substance, which is naturally soft, resembled a mass of mortar, and was easily friable between the fingers. This observation is not uncommon; 'tis the gouty humour become

extremely dense and deficcated by the natural heat of the lungs, which has thus changed the substance of that organ. This is the more manifest, the substance of the lungs in this case perfectly resembling that of the nodes in the extremities. It is easily to be imagined that the lungs thus vitiated could not perform their natural functions without great difficulty.

In other bodies the lungs have been found full of unequal tubercles of a calcareous substance, and in both were some small abscesses out of which issued a purulent matter; but these abscesses were the effort of the compression doubtless occasioned by the distention of the vessels grown solid by the long continuance of the superabundance of the gouty humour. The lungs are also often found to adhere to the pleura, and hence this kind of gout is thought to be an asthma, or a dropsy either of the breast or pericardium.

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The gout translated to the stomach, declares itself by nauseas, which become daily more frequent; these are sometimes followed by vomitings, which also return from time to time, and afterwards become habitual. Other symptoms are, pains in the stomach, indigestions, a capricious appetite, and, sometimes, after the nauseas have continued a few days, an extraordinary hunger. If the gouty humour be thick and gross, the pains felt in this part augment, the vomitings increase, and the nauseas become more general.

If the intestines be the seat of the deposition, it manifests itself by diarrhæas, which gradually increasing, at length become habitual, and are often attended with colics and griping of the intestines, to which is sometimes added a dysentery:

Depositions in the kidneys occasion great quantities of sand, whence nephritic pains, which, if not so sharp as may be sometimes felt

felt in the gravel, are continual. In this part also are formed stony concretions of a considerable bigness, but always of a calcarious nature; a palpable proof that the deposition is formed by the gouty humour, and even of the grossest kind.

The gout translated to the liver has always its particular symptoms; the part hardens, becomes oppilated, separates little or no bile, the excrements are whitish, with a continual want of appetite. Calcarious tubercles are also formed in its substance, and concretions of the same nature, but of different sizes, are produced in the gall-bladder.

All these distempers are generally at their beginning unobserved by gouty patients, and becoming obstinate by time, they reduce them to a languor and emaciation which at length puts a period to their existence.

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The diagnostic of this distemper has little difficulty; the skilful physician easily perceives the disorder reigning in the body. The affected viscus suffers greatly, its functions become continually weak and irregular. The whole difficulty is to distinguish whether it be the gouty humour spontaneously translated, that is the real cause of the distemper.

Whenever a gouty person is seized with a distemper which does not manifest itself by its proper symptoms, or brings with it worse, than seem to comport with the present state of the patient, the gouty humour may be concluded to be the principal cause. In this case the distemper insensibly increasing without having had recourse to topics, it can only be caused by the gouty humour gradually increasing in the viscus. Its continuance also is owing to the incessant deposition of the humour, which perpetually increases the distemper.

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The prognostic in these several cases, has always been considered as very threatening. The cause of the distemper was generally unknown; the remedies made use of procured no relief, and the cure was considered as desperate. If the cause happened to be discovered it was always too late, it having never been imagined that the gout could translate itself; and when, at last, it came to be suspected, the distemper was become incurable.

It is, however, easily removed at the beginning.

But in order to this no turtle broth, or water gruel, must be prescribed; for however they may be valued among the great, they feed the gouty humour. The same must be observed with regard to mucilaginous remedies, so commonly prescribed in a cough, from its being thought to proceed from an irritation caused by the acrimony of the fluids.

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If the treatment be delayed till the affected viscera be extremely weakened, till they have totally lost their elasticity, and the greatest part of their vessels are oppilated, gentle remedies will be then too weak, and the stronger will operate too forcibly; so that it is often better to leave the patient entirely to nature, than to attempt to relieve him by remedies, which, in his situation, must be injurious.

Method of cure. Of all the distempers I have just mentioned, the sole cause is the presence of the gouty humour, continually depositing itself in the viscera. So that here are two intentions to be answered. The first is, to free the viscus as much as possible from the humour, which causes its disorder. The second is to divert this humour, which is continually precipitating on it, in such a manner, that it may be deposited in some other part.

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The first intention is answered by evacuating part of the humour with the gentle and insipid emetics already mentioned, and of which one dose will be sufficient. Afterwards endeavours must be used for drawing another part of the humour into the extremities, by simply bathing these parts; as nature when she allows time to relieve her, must not be forced. The slow and gradual formation of a deposition in a viscus, never causes great disorders; so that powerful remedies would be improper.

Both these indications may be answered at the same time, by the use of spirituous cordials, such as small, but often repeated, doses of good wines. They produce a very happy effect when this gout first becomes irregular. Sydenham and Musgrave greatly recommend their use, when the gouty humour, before its precipitation in the extremities, occasions in the stomach and intestines, flatulencies and pains erroneously

roneously termed the colic ; for in this case, these cordials clear the viscera, and enable nature, more easily than before, to force the gouty humour into the extremities, and likewise promote there the formation of the depositions. At the beginning of the gout's fixing itself on the viscera, the relief is not more difficult than in the former case ; an increase of the elasticity of the fibres sometimes enables nature to dislodge this gross humour, not then noxious by its abundance, but by its density, which will not permit it to float in the blood as before.

Let the patient take two or three gentle purges of manna mixed with some syrup ; unless part of the humour has before been drawn into the extremities, and the viscera cleared. The day after administering the purge, let him take twelve or fifteen grains of the medicinal soap, morning and evening, and increase the dose as the patient gathers strength ; it being usual for him

him to be very weak in this kind of gout. His ptisan is to be more or less saturated with salts, according to the nature of the part affected, still continuing the use of good wines, which are here absolutely necessary.

It would be superfluous to forbid bleeding and opiates, nature being already too weak, and it is even her weakness which brings on this kind of irregular gout. I shall not much insist on warning the patient against indulging his appetite, as there is little danger of it. Nauseas are now general; but he must take something to nourish him, tho' but very little at a time, and that of select aliments. Nothing is more proper than light fish fried; little soup, or that which is very thin. Persons labouring under this kind of gout, and punctually observing the foregoing directions, will not be long before they feel its success. The remedies may then be succeeded by those that are stronger, and
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more nutritive foods, nature being now in a condition of bearing both the one and the other.

I shall not here specify the particular treatment of every distemper which may proceed from this kind of gout, as it must be nearly the same with that necessary in the gout accidentally translated, except that there is no necessity for the remedies being so violent, as this allows time for proceeding with greater caution and safety.

C H A P. XII.

Of the irregular Gout, properly so called.

THERE is still a kind of irregular gout, which chiefly attacks young persons, who eat largely, whose fibres are lax and flaccid, and descended from gouty parents; and, consequently, may be subject to an hereditary gout, of what nature soever it be: this kind of gout, even at its first appearance, constantly attacks the

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viscera,

viscera, without any previous notice in any articulation. I term it an irregular gout properly so called, its cause being entirely natural, as it comes on without the concurrence of any accidental cause.

Tho' I am persuaded that this kind of gout may disorder all the organs necessary to life, yet I dare not affirm it. I have, as yet, observed it only in the lungs, stomach and kidneys, which it affects almost in the same manner as the gout spontaneously translated; but the pains attending it are less acute. Besides the superabundance of mucilage in the mass of the humours, the primary source of all kinds of gout, that now under consideration, is caused by the insufficiency of nature's efforts to drive the gouty humour into the extremities. But these efforts are insufficient only from the too great elasticity of the vessels of the extremities during youth; and this hinders the gouty humour from
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being deposited in them, and obliges nature to precipitate it on the weakest viscus.

The symptoms attending this kind of gout, are as different as those of the distemper occasioned by it. The precipitation of this humour on the lungs, causes a dry asthma, even in a phlegmatic constitution; but without hindering the patient from using a great deal of exercise, or even working hard, he not being fatigued by either.

Respiration is attended with a noise; the breast emits nearly the same sound as that of some wild beasts, *Ferinum quid sonat*. In fine, the difficulty of breathing is not very great, especially in the beginning, when it never answers to the apparent disorder in the lungs. Farther, the pulse is small, and slow, and the patient without any fever. An intemperance in eating, however, increases the difficulty of respiration, and all the symptoms be-

come more threatening in proportion to the progress of the distemper.

If the attack be made on the stomach it is known by an habitual rejection of part of the food without any preceding nausea. The digestive juices, as yet little vitiated, perform their functions; but the fibres of this viscus, when incumbered with this gouty humour, which always renders them more arid than they naturally ought to be, become extremely susceptible of irritation; so that strong emetics are, in this case, always attended with great exacerbations.

The presence of the gouty humour in the kidneys is indicated by a seeming weight in these parts, and by continual but supportable nephritic pains. The urine is turbid, with a large quantity of sand, and mucilaginous filaments, as Hippocrates calls them. And here it may not be amiss to observe, that the small filaments in turbid urine, which I have discovered to be
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mucilaginous bodies very closely compacted, and representing small fibres, are abundant proofs that such urine proceeded either from a gouty person, or one subject to the stone or gravel.

Diagnostic. The distemper under consideration is easily distinguished by attending to its concomitant symptoms ; but the cause is not so easily discovered, as these distempers might flow from different causes, and even from a concurrence of several causes at the same time. There is however no mistaking it in the beginning ; for the patient still retains his usual plumpness ; when the gouty humour is the cause of the distemper the plumpness continues longer than if it proceeded from any other cause ; and this is the only thing to be regarded, for determining whether it is caused by the gouty humour ; especially if there be any reason to apprehend the patient subject to the hereditary gout.

Prognostic. This species of the gout is not dangerous when it attacks young persons, while nature is in her full vigour. These distempers are the usual consequences of too great strength, which insensibly impairing, a time will come, when the extremities, which always first feel the approaches of a general weakness, will more easily yield to a deposition of the humour. This very frequently happens without the assistance of art, and very readily, when proper means are used to accelerate this alteration.

But if this alteration be too long delayed, till the viscera are become extremely weak, and the patient's strength so greatly impaired as not to be recruited by a copious and succulent diet, a physician, during the whole course of his practice, does not meet with a more terrible state; the patient dies in the flower of his age, notwithstanding all attempts to relieve him.

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Method of Cure. As this irregular gout is entirely caused by the great elasticity in the vessels of the extremities, and the want of it in the affected viscus, that the cure of the disease occasioned by this gout may be attempted with success, the vessels of the extremities are to be rendered less elastic, and, at the same time, those of the viscus corroborated. Further, as the distemper is also the effect of a real superabundance of gouty humour, this consequently must be diminished, and endeavours used to exterminate it totally if possible. This is the true method if we are desirous not to be disappointed.

The first step must be to prescribe gentle emetics without repeating them; these discharge part of the humours; and their effect must be afterwards seconded by manna, joined with a laxative syrup, and sometimes with salts, as circumstances may require. After this the quantity of food must be considerably retrenched, and less nutritive

foods substituted in the room of those generally used by the patient. He is also to drink ptisans, or rather infusions saturated with the salts of germander and ground-pine, and to continue them in case the kidneys are not affected by them. He is, however, to be indulged with some glasses of good wine, with a toast. Lastly, the patient is, in the beginning, to be treated in the same manner as a patient attacked by the regular gout.

At the same time the extremities are to be frequently bathed, in order to draw thither the superabundance of the humour still residing in the vessels. Bleeding seldom procures relief, it being followed by a general relaxation, which would greatly incommode the affected viscus. The epispastic cataplasms and vesicatories, generally increase the elasticity in the fibres, where it is already but too powerful. If the success has not been such as to draw part of the gouty humour into the articulations, this treatment of the patient will,
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however, diminish the quantity of the humour; and by that means the distemper may still be treated the same as if it was a regular gout; beginning with the use of the medicinal soap, administered twenty four grains every morning and evening. The dose is to be daily augmented till it becomes equal to half a dram, and gentle purges often administered.

The patient must use a great deal of exercise, either on foot or a horseback; but seldom in a coach; take the air, walk, play at tennis, sleep little, and divert himself as much as possible. He must also abandon his study for a considerable time, mix diverting exercise with his labour, if his calling oblige him to work. By observing these directions, the distemper cannot long continue.

C H A P. XIII.

Of the Gout complicated with venereal Distempers.

IT is seldom that two distempers of long continuance are found at the same time in the same subject, unless one be caused by the other. The gout is, however, often seen complicated with other chronical distempers. But this will not appear surprising if we consider attentively the nature of the gout. It is, as we have already shewn, the effect of nutritive liquors and succulent foods, all well digested, and hurtful only by an intemperate use of them, and the superabundance of the mucilaginous humour they occasion. This superabundance may be rendered susceptible of every species of vitious particles that may affect the human body. The gout is consequently then a complicated distemper, and must be treated in a manner different from any we have hitherto mentioned.

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Of all the distempers with which the gout may exist conjointly, I shall only consider the venereal disease, and the scurvy, these being the two with which the gout is most generally complicated.

The symptoms of the gout complicated with venereal distempers are the same with those of the regular or irregular gout, according to the kind of gout; the difference consists only in their appearing and remitting in very few days, and allowing very little respite; tho' the patient, both in the quantity and quality of his diet, cannot be charged with any intemperance. The gout no longer observes any regular returns, rages for two or three days, goes off quickly, but returns after an interval of about a week; and after a respite of some days ease, renews its tortures.

The cause of these frequent fits, and irregular returns, proceeds from the virus, which in venereal distempers infects the juices, and inspissates them so as to hinder
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their circulation. It is also the consequence of the multitude of obstructions in the glands, through which the lymphatic parts of the blood can no longer pass, and this retards the circulation. Thus the gouty humour in this case, tho' the quantity be very small, can be no longer either suspended or dispersed in the juices, and thus is obliged to deposite itself from time to time.

Diagnostic. That of the gout, and also of the venereal disease, are easily known by a slight attention to the symptoms attending each distemper. It is only by the frequency of the fits, the celerity of their attacks and dispersions, without any apparent cause, that the gouty humour is known not to be the only one abounding in the juices of the human body; but that they are vitiated by another cause. So that by attending to the symptoms of the distemper that seems latent, the disease is easily known.

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Prognostic. To prescribe against two distempers, each proceeding from very different causes, is attended with great difficulty; especially when these two distempers require opposite remedies; which is the very case with regard to gouty and venereal distempers, tho' both occasion an inspissation in the fluids.

Method of Cure. The gout is a chronic distemper, rarely threatening the life of the patient, till after a long continuance, even of many years. Venereal diseases, on the contrary, are more rapid in their malignity, suddenly attacking the foundations of the animal œconomy, and, if complicated with another distemper, soon work its destruction. The treatment of the venereal distemper is therefore to be first attended to; but with great caution not to excite copious evacuations, which are prejudicial in the gout. The purges are to be as gentle as possible, the humours are to be greatly attenuated, and simple diluents to be used, with frequent bathings; which, after an

intermission of some days, are to be repeated from time to time. Frictions or fumigations, are to succeed each other at proper intervals of time, especially in the beginning; and to be used only in proportion to the intervals between the fits of the gout. By this method the cure of the venereal distemper has frequently effected a total extirpation of the gout.

C H A P. XIV.

Of the Gout complicated with the Scurvy.

MANY are the causes of the scurvy; sometimes it proceeds from the extremity of want, and sometimes it is owing to an immoderate use of succulent and high-seasoned foods. The latter kind chiefly affects the great, and it is no wonder that they are often seized at the same time with the gout and scurvy, when their general method of living tends to bring on them both these distempers.

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Symptoms. Besides the symptoms particular to each distemper, there is one which carries conviction with it, that the gout is complicated with some other distemper. This is the frequent return of the fits, in persons who were afflicted with the gout, before the scurvy appeared.

Diagnostic. It is the same as that of distempers known to be complicated in the same subject. Whether it be the scurvy that is complicated with the gout, is easily known, by the patient's excessive appetite for meat, eating a large quantity more than usual, even to voracity.

Prognostic. It is intricate, as the destruction of the gouty humour is not to be attempted, and the scurvy very often does not shew itself till after it has insensibly made such ravages in the patient's body, as are not easily cured, and the machine become so weakened and exhausted, as to be past receiving any benefit from the methods made use of for its recovery.

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Method of Cure. This must be begun by attempting the cure of the scurvy, which is always the most urgent, except in a gout accidentally translated. It is a considerable advantage that the remedies proper for the scurvy are not improper in the gout, and may even abate the acuteness of its pains. Let therefore antiscorbutics be used; a preference being given to those of a cordial nature, such as antiscorbutic wines.

Flesh, and fat broths, are to be absolutely prohibited, and the patient confined to light fish, and vegetables abounding in water and volatile alkaline salts. The juleps should be made of scurvy-grass, brooklime, water-cresses, and mustard-seed tied up in a piece of cloth. In fine, the scurvy is to be treated in the same manner as if it were the sole distemper.

F I N I S.